# RUSS OLSON VOLUME 1 – CONTENTS

## Description

Introduction and Contents

Original Drawings from the SUPPLEMENT TO THE ELECRIC RAILWAYS OF MINNESOTA

Index to the Twin City rapid Transit Co. records, drawings, and negatives donated by the Minnesota Transportation Museum Inc. and me (Russ Olson) to the Minnesota Historical Society in 1993.

Catalog of the RUSSELL L. OLSON STREET RAILWAY RESEARH FILES at the Minnesota Historical Society

## Sub-divisions Within This Volume

- [Miscellaneous Notes]
- Contents
- TCRT MAT'LS @ MHS

# [MISCELLANEOUS NOTES]

Sweet Studios

Louis D. Sweet 1868 - 1947

605 Syndicate Arcade 1898-1910
29 So. 10th St. 1911-1919
67 So. 12th St. 1920-1928
2116 Nicollet Ave. 1929-1931

Frank W. Sweet 1870 - ?

605 Syndicate Arcade 1898-1910
29 So. 10th St. 1911

Bought Jacoby's negatives in 1892 which were later acquired by Edward Bromley.

# Portraits

History of Hennepin County
and Minneapolis
Holcombe & Bingham 1914

| | |
|---|---|
| Thomas Lowry | page 183 |
| Andrew B. Robbins | page 450 |
| C. A. Pillsbury | page 200 |
| H. T. Welles | page 248 |
| E. W. Herrick | page 420 |
| Martin B. Koon | page 208 |

Aug. 12, 1952

Dear Kirt,

Russ Olson is now "in", and left Minneapolis this morning for Fort Sheridan, Illinois. They were told they would be there for five days. He can not get any pass to get out of the camp, but they were told they can have visitors there from 5 to 11 in the evenings.

LAST FRANCE AVE. CARS ran ~~thi~~ yesterday; I enclose carbon about their shenanigans on the last morning. I was not out there.

LAST FORT SNELLING DUMMY RAN FRIDAY, AUGUST 1. There was no public announcement at all (in Mpls., anyhow), and I didn't know anything about it until the next day, Saturday, when the bulletin about it got posted at East Side.

It is replaced, weekdays only, by an extension of the Fort Snelling-Maria bus, running along the road parlleling the old tracks. Temporarily this is a shuttle bus only during rush hours, through service to St. Paul otherwise. FARES ARE COLLECTED, and are good for rides into either Minneapolis or St. Paul.

STREETCARS STILL ON St. Clair-Payne and Snelling Crosstown, probably O.K. for several weeks yet. About four of the new Macks (order of 25) were here, when the steel strike caused Mack to have to stop the finishing up of the others. These new Macks are numbered in low 1500s! GMs are 900s.

GRAND AVE. is supposed to be cleared off by Oct. 1, I think, but they have not settled what will happen. The company's shuttle bus is definitely turned down. So the company offers to use the same six buses scheduled for shuttle, and run them to the loop, to 6th St....10-minute rush hours, 20 days, 30 nights. Service is the point of argument now, as streetcars run 4 minutes during rush, 15 days, 20 nights (30 all day Sunday).

ALL ST. PAUL LOCAL LINES ARE TO GO BUS THIS YEAR. 25 Macks mentioned above will be followed by 50 more GMs in about October, and they can finish off St. Paul on one bus=one car basis used on other converted lines. There may be trouble on account of bus shortage in Minneapolis. Else we might see:

25 Macks -- go on St. Clair-Payne, soon, possibly also Snelling Ave., but it could be delayed till next step.

50 GMs -- Hamline-Cherokee, Grand-Mississippi, or, according to rumors that sound very possible: Grand Ave. buses by themselves, and Como-Mississippi bus line. From scheduling angle, this latter combination would require about same service on both ends of line. Also definitely company has planned splitting Como line between cities; I doubt it will ever be split into two streetcar lines, but will more likely go as mentioned above. St. Paul will then be considered all converted, except that they have announced now that to get most out of PCCs, they will be run on "inter-city" lines until the final conversion in 1958. This would definitely ~~by~~ be Selby-Lake and Interurban; I don't think Como-Harriet would last that long, as East Side is going, and I expect the transfer of the line will come at the time it is converted, and East Side abandoned at the same time. Anyhow this is slight change from earlier plan to keep Nicollet-2nd St. and Bryant-Johnson to the last.

# CONTENTS

## INTRODUCTION

My objective in establishing these notebooks is to accumulate in one place all the information that has been located since THE ELECTRIC RAILWAYS OF MINNESOTA was published. The information from the SUPPLEMENT TO THE ELECTRIC RAILWAYS OF MINNESOTA has been recopied to the appropriate notebooks. In many situations I have included information that space restraints prevented from inclusion in the book. The notebooks are numbered 1 thru 32 and the following CONTENTS section describes the subject material in each notebook.

THE ELECTRIC RAILWAYS OF MINNESOTA book.

SUPPLEMENT TO THE ELECTRIC RAILWAYS OF MINNESOTA

INTERURBANS SPECIAL 14 ELECTRIC RAILWAYS OF MINNEAPOLIS AND ST.PAUL

## CONTENTS

Notebook 1
Introduction and Contents
Original Drawings from the SUPPLEMENT TO THE ELECTRIC RAILWAYS OF MINNESOTA
Index to the Twin City Rapid Transit Co. records, drawings and negatives donated by the Minnesota Transportation Museum Inc. and myself to the Minnesota Historical Society in 1993.
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### TWIN CITY RAPID TRANSIT CO.

Notebook 2A
General and Corporate History
Financial and Ridership Information

Notebook 2B
Organization and Personnel

Notebook 2C
1944 Consultant's Report

Notebook 2D
Twin City Rapid Transit Co. history and developments 1949-1954 and thereafter.

Notebook 3A
Track Construction: horsecar and cablecar lines

Notebook 3B
Track Construction: electric lines
  Mpls. St. Ry. and St.Paul City Ry.
  North Side Street Railway
  Minneapolis Land & Investment Company
  Minneapolis & St.Paul Suburban Railroad: summary of track mileage and construction costs
Overhead construction details

Notebooks 4A and 4B
Minneapolis, Lyndale & Minnetonka Railway
  4A History, Roadway and Track, Operations, Miscellaneous Notes
  4B Equipment, Construction Costs and Financial Statements, Articles from Periodicals

Notebooks 5
Power Generation and Distribution

Notebook 6
Carhouses and Repair Shops
Buildings

Notebooks 7A and 7B
Lake Minnetonka Division, Minneapolis & St.Paul Suburban Railroad
- 7A Track and Overhead Construction, Construction Costs, Financial Information, Operations, Photographs
- 7B Right-of-Way Maps

Notebooks 8A, 8B and 8C
Stillwater Division, Minneapolis & St.Paul Suburban Railroad
- 8A North St.Paul Railroad, St.Paul & White Bear Railroad, Minneapolis & St.Paul Suburban Railway: Track and Overhead Construction,Operations, Financial Information and Construction Costs
- 8B Employee and Public Timetables; Photographs
- 8C Right-of-Way/Track Maps

Notebooks 9A and 9B
Operations

| | |
|---|---|
| 9A(1) | Organization; Line Combinations and Routes |
| 9A(2) | Route Maps, Car Line Descriptions, Destination Signs, Cars Operated |
| 9B | Operating Practices, Various Operating Topics |

Notebook 10
Equipment
- Horsecars, Cablecars, Original Electric Cars

Notebook 11
Equipment
- Car Building Programs, Double-Deck Cars, Classification System, Main Steam Station Rail Equipment, PCC Cars, Rebuilding Programs, Building-Rebuilding-Disposition Dates

Notebook 12A and 12B; Notebooks 12C and 12D
Equipment
- 12A Specifications
- 12B Exterior and Interior Details
- 12C Carbuilding Costs
- 12D Photographs for reference purposes

Notebook 13
Equipment
- Trucks, Motors and Controllers; Truck Identification, Traction Motors, Car Weights

Notebook 14
Equipment
- Shop Records 1898-1954

Notebooks 15A and 15B
Equipment
- Assignment of Cars 1909-1954

Notebooks 16A and 16B
- Car Watching Notes 1946-1954 Edwin H. Nelson

Notebooks 17A and 17B
Minnetonka & White Bear Navigation Company
   17A   Steamboats: Express Boats, Ferry Boats and Excursion Boats
   17B   Photographs of the Steamboats

Notebook 18
Minnetonka & White Bear Navigation Company
   Big Island Park, Tonka Bay Hotel, Wildwood Park

## DULUTH-SUPERIOR TRACTION COMPANY
## DULUTH STREET RAILWAY

Notebook 19A
General History

Notebook 19B
Track and Overhead Construction, Power Generation and Distribution, Carhouses and Shops

Notebook 19C
BADGER TRACTION, Central Electric Railfans Association

Notebook 20
Equipment
   Horsecars, Original Electric Cars

Notebook 21
Equipment
   Twin City Rapid Transit Co.-built Electric Cars, Duluth St. Ry.-built Service Cars, Carbuilding History, Building-Rebuilding-Disposition Dates, Trucks-Motors-Controllers, Original Cost per Car

## SMALLER STREET RAILWAY SYSTEMS

Notebook 22
Fargo & Moorhead Street Railway, Granite City Railway, Winona Railway & Light Company, Mankato Electric Traction Company, Wahpeton-Breckenridge Street Railway, Stillwater Street Railway, Grand Forks Street Railway, American Traction Company, Anoka Street Railway, LaCrosse (Wisconsin) City Railway

## INTERURBAN ELECTRIC RAILWAYS

Notebook 23
Mesaba Railway Company

Notebook 24A/24B
Minneapolis & Northern Railway
Minneapolis Anoka & Cuyuna Range Railway
Minneapolis Anoka & Cuyuna Range Railroad

Notebook 25
St.Paul Southern Electric Railway

## INTERURBAN GASOLINE-ELECTRIC RAILWAYS

Notebooks 26A and 26B
Minneapolis St.Paul Rochester & Dubuque Electric Traction Company
26A   History, Track Construction, Operations
26B   Equipment

Notebook 27A and 27B
27A Electric Short Line Railway
27B Electric Short Line Terminal Company

Notebooks 28A, 28B and 28C
Minneapolis Northfield & Southern Railway
28A History, Financial Information
28B Track Construction
28C Operations
28C Equipment

## OTHER MINNESOTA COMPANIES

Notebook 29A
Minnesota Northwestern Electric Railway, South St.Paul Rapid Transit Company, Minneapolis Municipal Waterworks Railway, Central Warehouse Company, Iron Ore Mining Railways

## CARBUILDING COMPANIES

Notebook 29B
Northern Car Company, Light Weight Noiseless Electric Street Car Company

## NORTH DAKOTA COMPANIES

Notebook 30
Valley City Street & Interurban Railway, Capitol Car Line

## MISCELLANEOUS

Notebook 31
Twin City & Lake Superior Railway (projected; some grading performed)

Notebook 32
Brill Magazine October 1912 Conditions Which Govern the Type of Car for City Service
Minneapolis and Saint Paul
Brill Magazine August 1915 Interurban Centers and Interuban Cars Minneapolis
A History of the Minneapolis Street Railway 1873-1908

## ACKNOWLEDGMENTS

In addition I wish to recognize the late Eugene J. Corbey. The vast extent of his collection was not learned until after his death. Documents and photographs in that collection greatly added to our store of historical information and increased our knowledge of technical matters.

Russell L. Olson
May, 2002

## PERIODICAL ABBREVIATIONS USED

| | | | |
|---|---|---|---|
| SRJ | Street Railway Journal | ERJ | Electric Railway Journal |
| SRR | Street Railway Review | ERR | Electric Railway Review |
| SRG | Street Railway Gazette | ERR | Electric Railway Gazette |
| ET | Electric Traction | ETW | Electric Traction Weekly |

## SUPPLEMENTAL INFORMATION

Many newspapers, publications, and books have been digitized are available on the Internet. I have researched what I have been able to find pertiaining to Minnesota's electric railways. Some of it has been downloaded and printed, or summarized by typewritten notes. Such material has been filed separately in the applicable notebooks. I have not attempted to revise the existing typewritten historical information. Future researchers using these notebooks will need to keep in mind that this additional information is scattered throughout the subject matter.

Russell L. Olson
December, 2009

# MINNESOTA'S ELECTRIC RAILWAYS

## Twin City Rapid Transit Co.

Minneapolis, St.Paul, Stillwater, Lake Minnetonka
523.68 track miles, 1,102 cars

Minneapolis Street Railway
Minneapolis local lines, including the Fort Snelling line: 258.024 track miles
Horsecars Sep 1875 – Electrified Dec 1889 – Abandoned Jun 1954

St.Paul City Railway/St.Paul Street Railway
St.Paul local lines: 173.962 track miles
Horsecars Jul 1872 – Electrified Feb 1890 – Abandoned Nov 1953
Cable cars Jan 1888 to Jun 1898 – Selby Hill counterweight Aug 1898 to Oct 1906

The Minneapolis-St.Paul "Interurban" line operated from Dec 1890 to Nov 1953.

Minneapolis & St. Paul Suburban Railroad/Minneapolis & St.Paul Suburban Railway: 91.701 track miles
Lake Minnetonka Division: 43.099 track miles
Minneapolis to Lake Calhoun /Lake Harriet
Lyndale Railway Co. 36" gage steam motor May 1879/Jul 1880 – Electrified (std gage) May 1891
Lake Harriet to Excelsior
Minneapolis, Lyndale & Minnetonka Railway Co. 36" gage steam Jul 1882 to Aug 1886
Minneapolis & St.Paul Suburban Railway
Lake Harriet to Excelsior Sep 1905
Deephaven Jct. to Deephaven Jun 1906
Hopkins branch Jun 1906
Excelsior to Tonka Bay May 1908
Abandonments
Hopkins to Excelsior and Tonka Bay, Deephaven Jct. to Deephaven Aug 1932
Brookside to Hopkins Aug 1951 Minneapolis to Brookside Jun 1954
Stillwater Division: 33.980 track miles
St.Paul to North St.Paul
North St.Paul Railroad steam motor Apr 1890 – Electrified Jun 1892
North St.Paul to Mahtomedi
St.Paul & White Bear Railroad Jun 1892
Minneapolis & St.Paul Suburban Railway
Wildwood to Stillwater Aug 1899
Stillwater local lines Nov 1899
Wildwood to White Bear Nov 1904
Stillwater to South Stillwater (Bayport) May 1905
Abandonments
Wildwood to Stillwater, Wildwood to White Bear, Stillwater local lines, and Stillwater to Bayport Aug 1932
Hazel Park to Mahtomedi Nov 1951 St.Paul to Hazel Park May 1952
Local Suburban Division 14.273 track miles

| | | |
|---|---|---|
| St.Louis Park line: Minneapolis Land & Investment Co. | 2.103 track miles | Dec 1892 to Aug 1938 |
| Robbinsdale line: North Side Street Railway | 1.846 track miles | Jun 1891 to Oct 1947 |
| Columbia Heights line | 1.544 track miles | Nov 1906 to Jul 1951 |
| South St.Paul line | 8.780 track miles | Aug 1905 to May 1952 |

| | |
|---|---|
| Minnetonka & White Bear Navigation Company | |
| Lake Minnetonka | |
| Express Steamboats | May 1906 to Sep 1926 |
| Big Island Park and Ferry Steamboats | May 1906 to Aug 1911 |
| Tonka Bay Hotel | Jun 1908 to Aug 1911 |

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**Duluth-Superior Traction Company**

Duluth, Minn. And Superior, Wisc.
113.659 track miles     152 cars

Duluth Street Railway: 84.838 track miles
Horsecars Nov 1882 - Electrified Nov 1890 - Abandoned Sep 1939
Incline Railway, cable operated: Dec 1891 to Sep 1939
Independent companies acquired: Woodland Company (Motor Line Improvement Co.), Highland Improvement Co., Lakeside Railway, Park Point St. Ry. (Interstate Traction Co./Minnesota Point St. Ry.)

Superior Rapid Transit Railway/Douglas County Street Railway: 28.001 track miles
Horsecars Aug 1887 – Electrified Jul 1890 – Abandoned Jun 1935

Duluth-Superior "Interstate" line operated from Sep 1897 to Jun 1935

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**Mesaba Railway Company**

Hibbing through Chisholm, Virginia and Eveleth to Gilbert

Dec 1912 to Apr 1927

36.55 track miles before the Hibbing-Chisholm relocation; 40.39 track miles thereafter.
12 passenger motor cars (2 city cars), 5 passenger trailers and 2 freight motor cars.

**Minneapolis, Anoka & Cuyuna Range Railroad**

Minneapolis to Anoka

Minneapolis & Northern Railway: Soo Line Railroad connection, Minneapolis, to Anoka
May 1913 to Jan 1915
Two McKeen gasoline-mechanical passenger cars and one McKeen gasoline-mechanical freight car

Minneapolis, Anoka & Cuyuna Range Railway: steam Apr 1915, electrified Oct 1915 and extended to connect with Minneapolis Street Railway, including trackage rights to downtown Minneapolis
Leased and electrified Pillsbury Lincoln Mill freight tracks in Anoka 1921

20.18 track miles + 1.72 track miles leased. 4.15 route miles of double track trackage rights.
Six passenger cars, 1 freight motor car, and 1 electric locomotive

Reorganized 1930 as Minneapolis, Anoka & Cuyuna Range Railroad
Passenger service ceased Aug 1939

Became wholly owned subsidiary of Northern Ordnance Inc. Sep 1943
Abandoned Fridley to Anoka Nov 1943; Great Northern Railway took over Anoka freight tracks.
Electric passenger service from Minneapolis St. Ry. connection to Fridley for Northern Ordnance Inc. employees (3 passenger cars) Oct 1943 to Apr 1948. Electric freight service (1 electric locomotive) from Soo Line Railroad connection, Minneapolis, to Fridley Oct 1943 to Aug 1957.

Electric locomotive converted to diesel-electric 1957. Railroad sold to Great Northern Railway 1966.

### St.Paul Southern Electric Railway

St.Paul to Hastings

Inver Grove to Hastings Nov 1914 to Jul 1928

18.05 track miles plus trackage rights over Minneapolis & St. Paul Suburban Railroad (Inver Grove to St.Paul) and St.Paul City Railway (to downtown St.Paul).

Four passenger cars and one combination freight motor/work car/snow plow.

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### Brainerd Electric Street Railway

Brainerd

Horsecars 1887-1889 Electric 1893-1898 3.5 miles Four passenger cars

### Wahpeton-Breckenridge Street Railway

Breckenridge, Minn. To Wahpeton, N.D.

Electric Aug 1910 to Mar 1925 1.144 track miles (1.068 in Minnesota) Two passenger cars

### Mankato Electric Traction Company

Mankato

Horsecars Jul 1886 to Oct 1895 Electric May 1908 to Mar 1930 5.00 track miles Six passenger cars

### Fargo & Moorhead Street Railway
(Northern States Power Company)

Moorhead, Minn. To Fargo, N.D.

Fargo: Horsecars 1879 only and 1882 only Electric Nov 1904 to Aug 1937
Moorhead: Electric Nov 1904 to Jun 1937
Fargo to Moorhead line: Nov 1904 to Jul 1937
Moorhead to Dilworth line: Dec 1912 to Jul 1937

16.468 track miles of which 7.04 miles was in Moorhead-Dilworth
29 passenger motor cars and 16 passenger trailers

### St.Cloud Public Service Company
(Northern States Power Company)

St.Cloud, Sauk Rapids

Horsecars Oct 1887 Electrified Jun 1892 Abandoned Apr 1936
Predecessors: Granite City Railway, Benton Power & Traction Co., St.Cloud [City] Street Car Co., St. Cloud & Sauk Rapids Railway.
9.50 track miles 19 passenger cars

### Stillwater Electric Street Railway

Stillwater

First electric line in Minnesota Jun 1889 to Apr 1897
5.50 track miles Six or seven passenger cars

### Mississippi Valley Public Service Company

Winona

Horsecars Dec 1883 – Electrified Jan 1892 – Abandoned Jul 1938
Predecessors: Wisconsin Railway Light & Power Co., Winona Railway & Light Co., Winona City Railway.
7.005 track miles 15 passenger cars

### Grand Forks Street Railway

East Grand Forks, Minn.

This company located in Grand Forks, N.D., operated a short interstate branch line from Grand Forks to East Grand Forks from early 1911 to Jun 1919.

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### Minneapolis Municipal Waterworks Railway
(Minneapolis Filtration Plant Railway)

Columbia Heights

Freight and passenger service Nov 1917 to May 1953

1.60 track miles One combination passenger/freight motor car

### Central Warehouse Company

St.Paul

Industrial/commercial switching. Approximately 2.75 track miles. One locomotive: gasoline-electric 1917-1919, straight electric 1919-1951, diesel-electric 1951-198?

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### Anoka Street Railway

Anoka

Horsecars Jun 1884 to 1894 3.00 track miles 3 horsecars

### American Traction Company

International Falls to Ranier

Two gasoline-mechanical and one Edison storage battery passenger cars Sep 1916 to Fall 1918 or 1919
6.75 track miles

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### Hanna Ore Mining Company

| | | | |
|---|---|---|---|
| Wabigon Mine, Buhl | 1924-1930 | | Three electric locomotives |
| Mesabi Chief Mine, Keewatin | 1928-1968 | Approximately 1.75 miles | Three electric locomotives |

### Inter-State Iron Company

| | | | |
|---|---|---|---|
| Hil-Annex Mine, Calumet | 1930-1955 | Approximately 22 miles | Eight electric locomotives |

### Mesaba-Cliffs Mining Company

| | | | |
|---|---|---|---|
| Hill-Trumbull Mine, Marble | 19??-1972 | Approximately 1.75 miles | Three electric locomotives |

### Oliver Iron Mining Company

| | | | |
|---|---|---|---|
| Virginia Crusher, Virginia | 1924-197? | Approximately ½ mile | One small electric locomotive |
| Hull-Rust Crusher, Hibbing | 19?? –late 1960's | Approximately ¼ mile | One small electric locomotive |

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### Minneapolis, St.Paul, Rochester & Dubuque Electric Traction Company

"Dan Patch Electric Line"

Minneapolis to Northfield 45 miles

Gasoline-electric passenger service; gasoline-electric and steam freight service 1910-1918
Acquired by Minneapolis, Northfield & Southern Railway 1918

## Electric Short Line Railway

"Luce Electric Lines"

Minneapolis to Gluek 115 miles

Gasoline-electric passenger service, steam freight service:
Minneapolis to Hutchinson 58 miles 1914-1916
Extended to Lake Lillian 1922/1923 Reorganized as Minnesota Western Railroad 1924
Extended to Gluek 1927 Reorganized as Minnesota Western Railway 1932

## Minnesota Northwestern Electric Railway

Thief River Falls to Goodridge 18 miles

Gasoline-electric passenger and freight service; one gasoline-electric passenger car.
Built 1914. Owned by Soo Line Railroad. Abandoned 1940.

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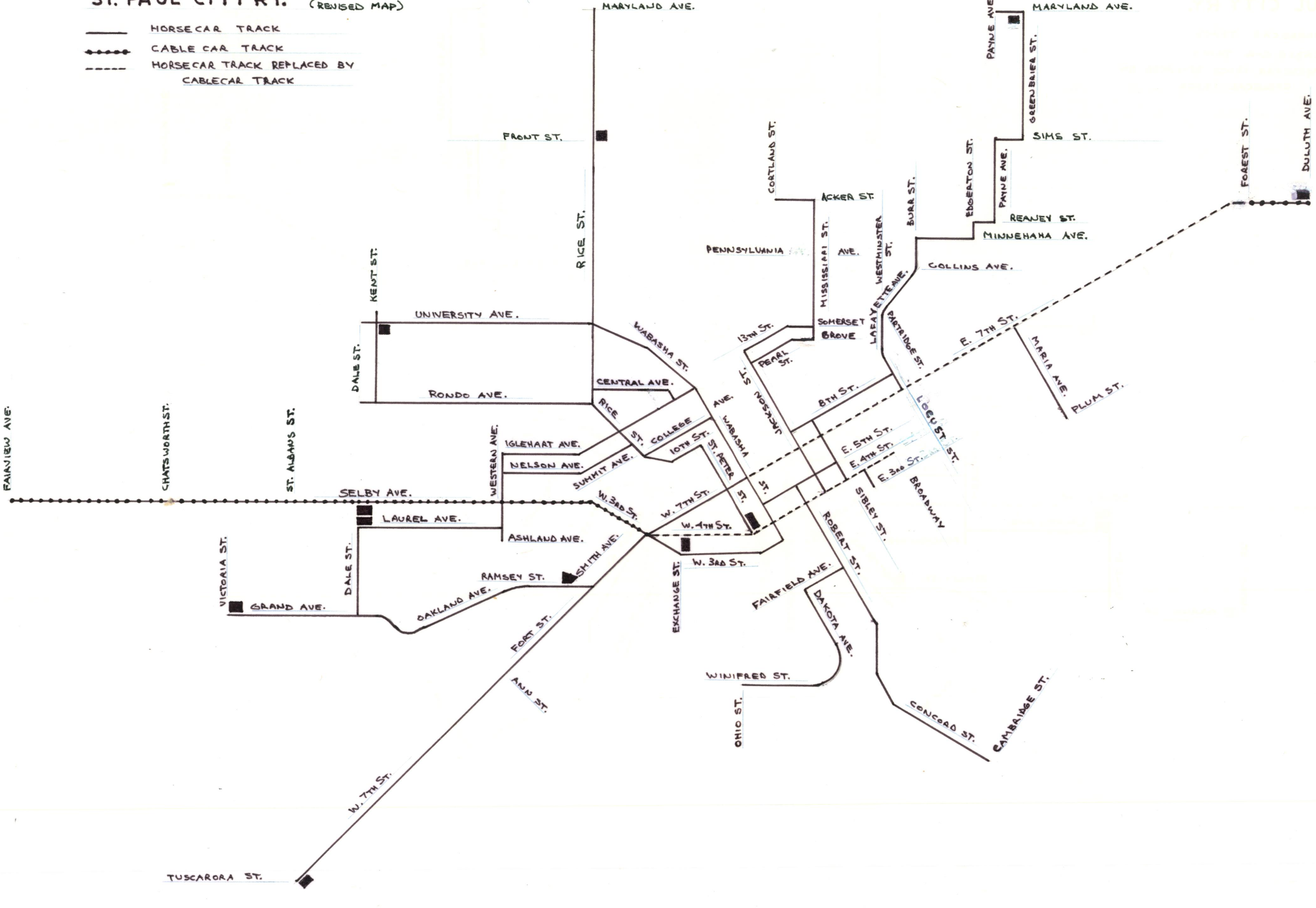
Rails To The Norh Star
Richard Prosser

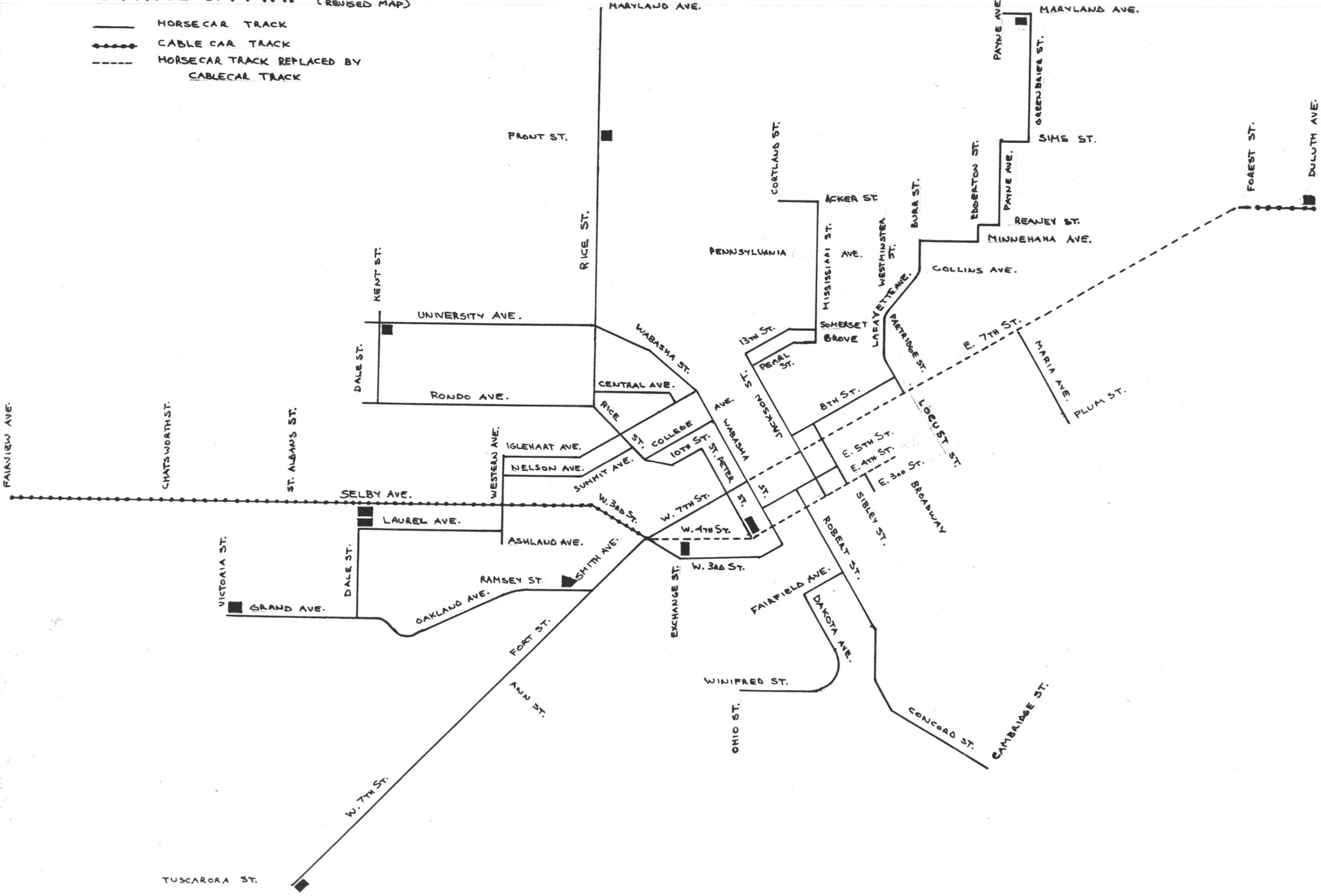
# OTHER STREET AND ELECTRIC RAILROAD COMPANIES INCORPORATED IN MINNESOTA

Benton Power and Traction Company, 9/13/97 (Sauk Rapids)
Brainerd Electric Railway Company, 3/11/93
Brainerd Street Railway Company, 7/28/86
City Railway Company of Duluth, 11/25/93
Cloquet Valley Railroad Company, 6/20/12
Como Railway Company, 3/30/80 (St. Paul)
Duluth and Northern Traction Company, 5/4/11
Duluth Electric Railway Company, 4/5/90
Granite City Railway Company, 1/16/06 (St. Cloud)
Hennepin County Gravity Railway Company, 7/15/84
La Crosse and Winona Traction Company, 1/31/07
Lakeside Railway Company, 6/20/92 (Duluth)
Lyndale Railway Company, 6/21/78
Mankato and St. Peter Railway and Lightning Company, 3/31/02
Mankato Electric Street Railway Light and Power Company, 6/10/99
Mankato Railway Light and Power Company, 8/2/04
Mesabe Range Traction Company, 1/27/06 (St. Louis Co.)
Mille Lacs and Minneapolis Electric Railway Company, 11/2/04
Minneapolis and Anoka Electric Suburban Railway Company, 2/24/98
Minneapolis and Anoka Railway Company, 6/14/01
Minneapolis and Champlin Railway Company, 3/12/86
Minneapolis and Champlin Suburban Railway Company, 8/30/98
Minneapolis and Iowa Electric Railway Company, 1/7/02 (Decorah-St. Paul)
Minneapolis, Minnehaha and Fort Snelling Railway Company, 6/30/84
Minneapolis Northern Suburban Railway Company, 9/19/10
Minnesota Central Railway Company, 6/28/13 (Crow Wing and Aitkin Co's.)
Minnesota Midland Electric Railway Company, 1/27/02 (Little Falls)
Missabe Electric Railway Company, 9/11/02
Missabe Traction Company, 8/10/06
Northern Traction Company, 6/25/06 (St. Louis Co.)
Park Point Street Railway Company, 12/24/86 (Duluth)
Pioneer Electric Railway Company, 5/20/04 (White Rock—St. Paul)
Proctor Bay View Transit Company, 5/27/10
Ramsey County Gravity Railway Company, 7/1/84
Remington Park Railway Company, 4/27/83 (Minneapolis)
St. Anthony Railway Company, 1/9/83
St. Francis Electric Railway Company, 12/12/00
St. Paul and St. Anthony Railroad Company, 3/2/53
St. Paul, Fort Snelling and Minneapolis Railway Company, 1/21/86
St. Paul, Minneapolis and Minnetonka Railway Company, 1/9/84
St. Paul Motor and Horse Railway Company, 8/18/81
St. Paul Railway Promotion Company, 9/21/10
Sioux Falls and Southern Minnesota Traction Company, 4/22/11 (Sioux Falls—Albert Lea)
Southern Minnesota Traction Company, 8/19/14
Stillwater Electric Railway Company, 7/11/94
Suburban Traction Company, 6/14/11 (Duluth)
Twin City Underground and Elevated Electrical Railway Company, 7/1/08
Virginia, Eveleth and Gilbert Traction Company, 3/15/11
Wabasha Street Railway Company, 10/5/83

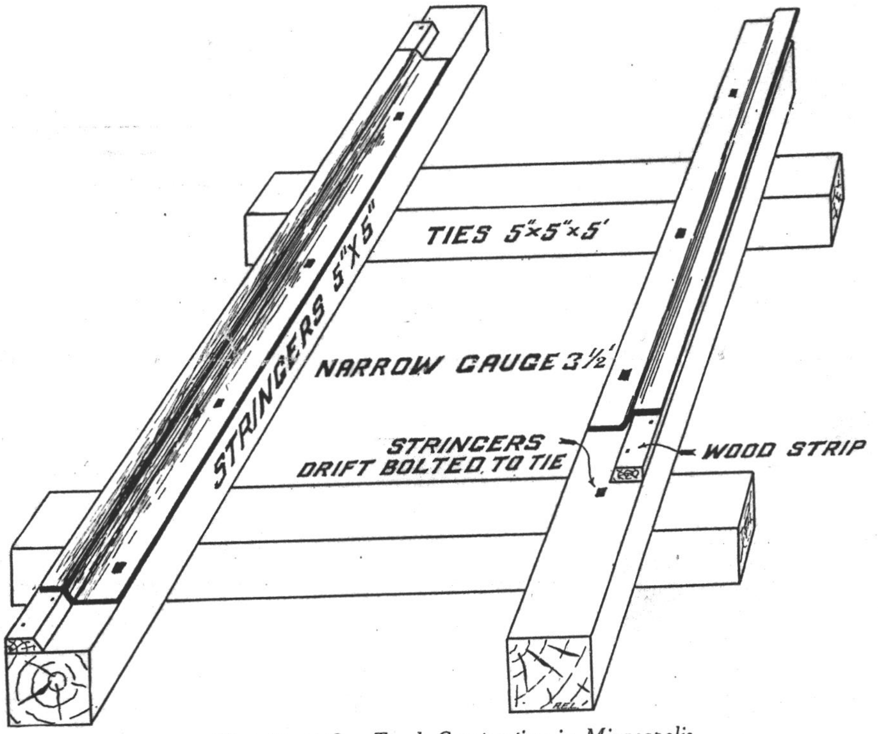
## ST. PAUL CITY RY. (REVISED MAP)


HORSECAR TRACK
CABLE CAR TRACK
HORSECAR TRACK REPLACED BY CABLECAR TRACK
MARYLAND AVE.
FRONT ST.
RICE ST.
KENT ST.
UNIVERSITY AVE.
DALE ST.
RONDO AVE.
WABASHA ST.
CENTRAL AVE.
RICE ST.
COLLEGE AVE.
10TH ST.
ST. PETER ST.
WABASHA ST.
IGLEHART AVE.
NELSON AVE.
SUMMIT AVE.
WESTERN AVE.
FAIRVIEW AVE.
CHATSWORTH ST.
ST. ALBANS ST.
SELBY AVE.
LAUREL AVE.
ASHLAND AVE.
W. 3RD ST.
W. 7TH ST.
W. 4TH ST.
W. 3RD ST.
EXCHANGE ST.
VICTORIA ST.
DALE ST.
GRAND AVE.
RAMSEY ST.
SMITH AVE.
OAKLAND AVE.
FORT ST.
ANN ST.
W. 7TH ST.
TUSCARORA ST.
CORTLAND ST.
ACKER ST.
PENNSYLVANIA AVE.
MISSISSIPPI ST.
WESTMINSTER ST.
13TH ST.
SOMERSET
GROVE
PEARL ST.
JACKSON ST.
8TH ST.
E. 5TH ST.
E. 4TH ST.
E. 3RD ST.
SIBLEY ST.
BROADWAY
ROBERT ST.
FAIRFIELD AVE.
DAKOTA AVE.
WINIFRED ST.
OHIO ST.
CONCORD ST.
CAMBRIDGE ST.
LAFAYETTE AVE.
PARTRIDGE ST.
LOCUST ST.
E. 7TH ST.
MARIA AVE.
PLUM ST.
COLLINS AVE.
BURR ST.
MINNEHAHA AVE.
EDGERTON ST.
PAYNE AVE.
REANEY ST.
SIMS ST.
GREENBRIER ST.
PAYNE AVE.
MARYLAND AVE.
FOREST ST.
DULUTH AVE.

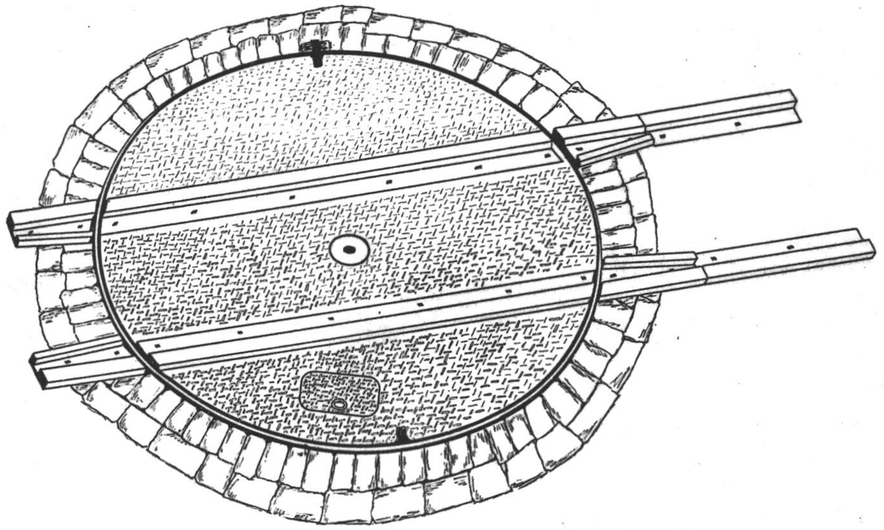
# ST. PAUL CITY RY. (REVISED MAP)



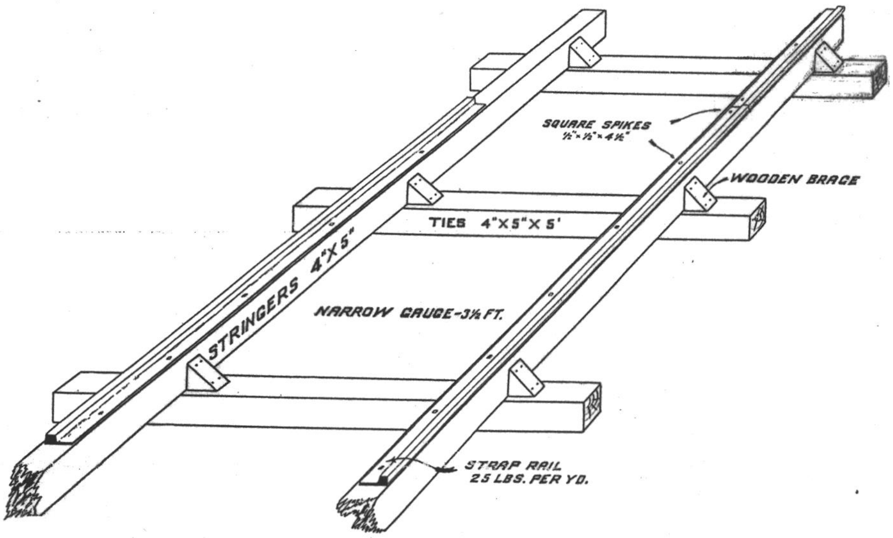
HORSECAR TRACK
CABLE CAR TRACK
HORSECAR TRACK REPLACED BY CABLECAR TRACK
MARYLAND AVE.
FRONT ST.
RICE ST.
PAYNE AVE.
MARYLAND AVE.
GREENBRIER ST.
SIMS ST.
DULUTH AVE.
FOREST ST.
CORTLAND ST.
ACKER ST.
EDGERTON ST.
PAYNE AVE.
REANEY ST.
BURR ST.
MINNEHAHA AVE.
PENNSYLVANIA
MISSISSIPPI ST.
AVE.
WESTMINSTER ST.
COLLINS AVE.
LAFAYETTE AVE.
KENT ST.
UNIVERSITY AVE.
SOMERSET
GROVE
13TH ST.
PARTRIDGE ST.
E. 7TH ST.
WABASHA ST.
PEARL ST.
MARIA AVE.
DALE ST.
RONDO AVE.
CENTRAL AVE.
JACKSON ST.
8TH ST.
PLUM ST.
FAIRVIEW AVE.
CHATSWORTH ST.
ST. ALBANS ST.
WESTERN AVE.
RICE ST.
COLLEGE AVE.
WABASHA ST.
LOCUST ST.
IGLEHART AVE.
10TH ST.
ST. PETER ST.
E. 5TH ST.
E. 4TH ST.
E. 3RD ST.
NELSON AVE.
SUMMIT AVE.
BROADWAY
SELBY AVE.
W. 3RD ST.
W. 7TH ST.
SIBLEY ST.
LAUREL AVE.
ASHLAND AVE.
W. 4TH ST.
ROBERT ST.
VICTORIA ST.
DALE ST.
SMITH AVE.
W. 3RD ST.
RAMSEY ST.
EXCHANGE ST.
FAIRFIELD AVE.
GRAND AVE.
OAKLAND AVE.
DAKOTA AVE.
FORT ST.
WINIFRED ST.
ANN ST.
OHIO ST.
CONCORD ST.
CAMBRIDGE ST.
W. 7TH ST.
TUSCARORA ST.


TIES 5"×5"×5'
STRINGERS 5"X5"
NARROW GAUGE 3½'
STRINGERS
DRIFT BOLTED TO TIE
WOOD STRIP

*First Street Car Track Construction in Minneapolis.*



*Type of First Street Car Turntable in Minneapolis.*
*These Turntables were located at terminals of lines and cars were turned on them instead of using the "Y" system that obtains today.*

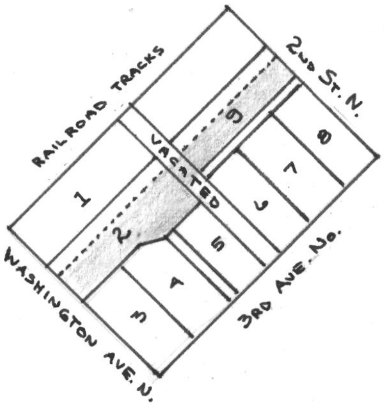

SQUARE SPIKES
½"×½"×4½"
WOODEN BRACE
TIES 4"X5"X 5'
STRINGERS 4"X 5"
NARROW GAUGE-3½ FT.
STRAP RAIL
25 LBS. PER YD.

*Second Street Car Track Construction in Minneapolis.*

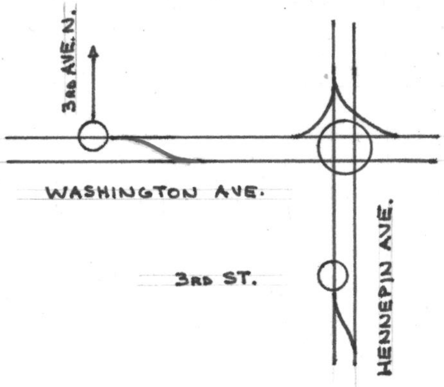
# MINNEAPOLIS ST. RY. TRACK LAYOUTS

## HORSECAR SYSTEM

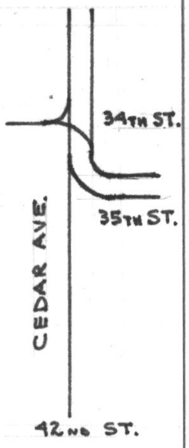
### FIRST HORSECAR BARN SITE


RAILROAD TRACKS
2ND ST. N.
VACATED
WASHINGTON AVE. N.
3RD AVE. NO.
1
2
3
4
5
6
7
8
9

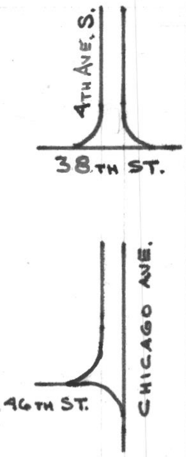
### INTERSECTION DETAIL


3RD AVE. N.
WASHINGTON AVE.
3RD ST.
HENNEPIN AVE.

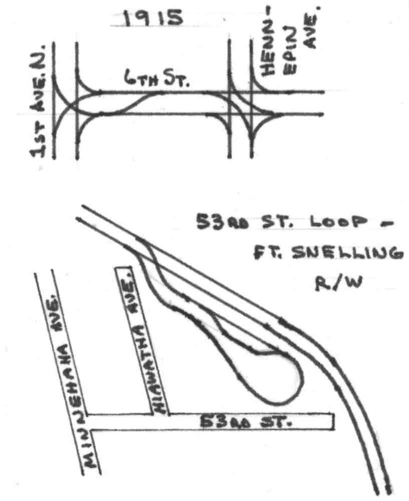
### 1912 & 1914


34TH ST.
35TH ST.
CEDAR AVE.
42ND ST.

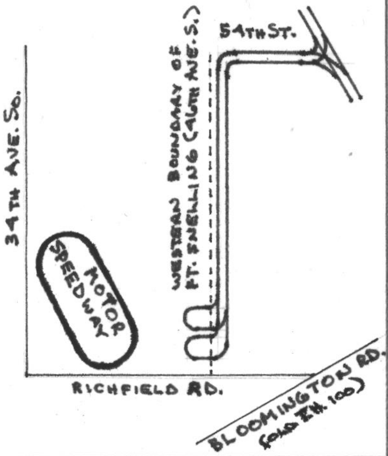
### 1915


4TH AVE. S.
38TH ST.
CHICAGO AVE.
46TH ST.

### 1915

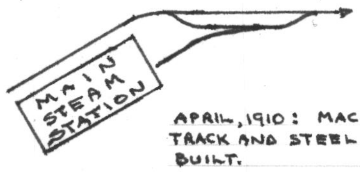

1ST AVE. N.
6TH ST.
HENNEPIN AVE.
53RD ST. LOOP - FT. SNELLING R/W
MINNEHAHA AVE.
HIAWATHA AVE.
53RD ST.

### 1915 MOTOR SPEEDWAY SPUR


54TH ST.
34TH AVE. SO.
WESTERN BOUNDARY OF FT. SNELLING (46TH AVE. S.)
MOTOR SPEEDWAY
RICHFIELD RD.
BLOOMINGTON RD. (OLD TH. 100)

### 1907

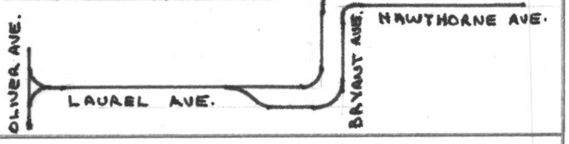
### MAIN STEAM STATION


MAIN STEAM STATION

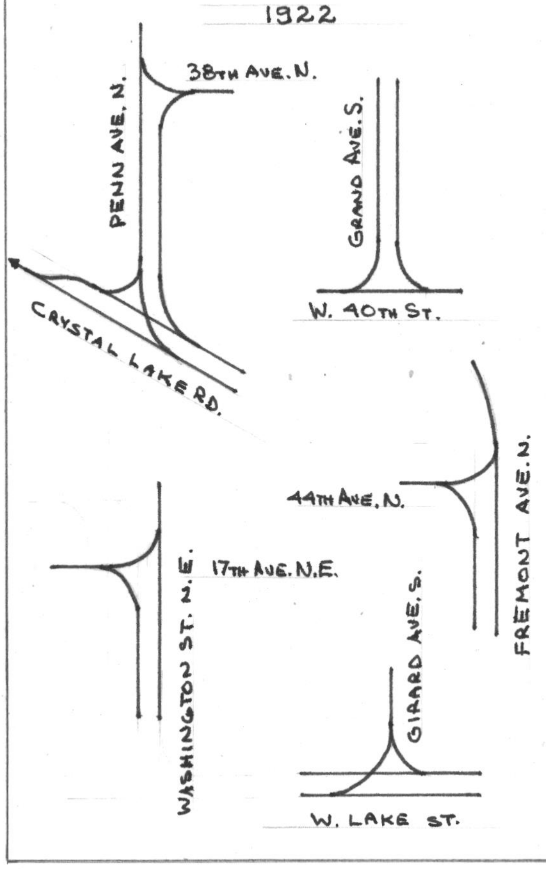
APRIL, 1910: MACHINERY SPUR TRACK AND STEEL TRESTLE BUILT.

1912: NEW SPUR TRACK AND STEEL TRESTLE BUILT.

### 1922 BRYN MAWR LINE

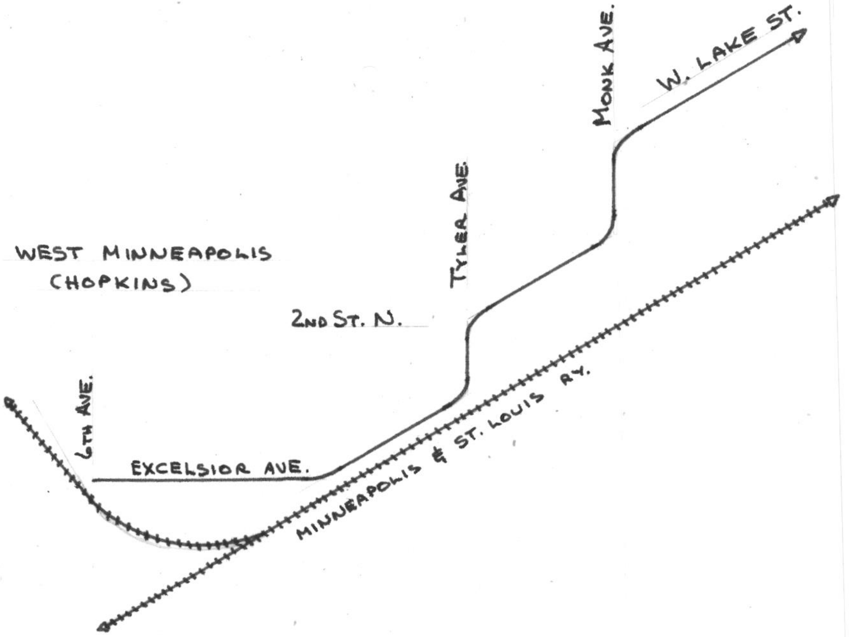

HAWTHORNE AVE.
OLIVER AVE.
LAUREL AVE.
BRYANT AVE.

### 1922

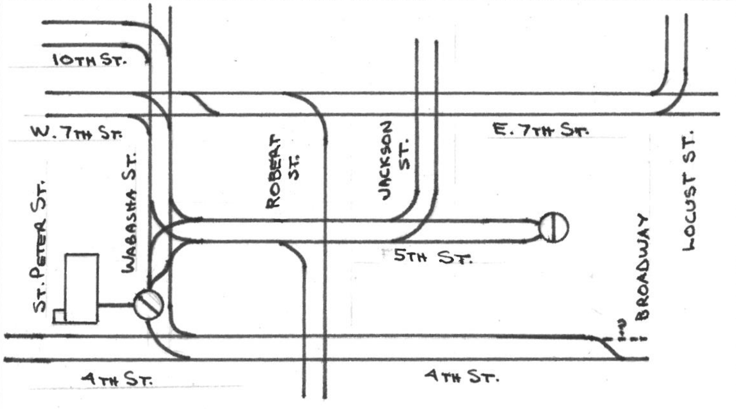

38TH AVE. N.
PENN AVE. N.
CRYSTAL LAKE RD.
GRAND AVE. S.
W. 40TH ST.
44TH AVE. N.
FREMONT AVE. N.
17TH AVE. N.E.
WASHINGTON ST. N.E.
GIRARD AVE. S.
W. LAKE ST.

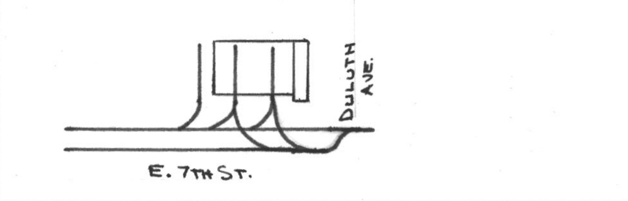
MINNEAPOLIS LAND & INVESTMENT CO. LINE FROM ST. LOUIS PARK TO HOPKINS 1898-1907

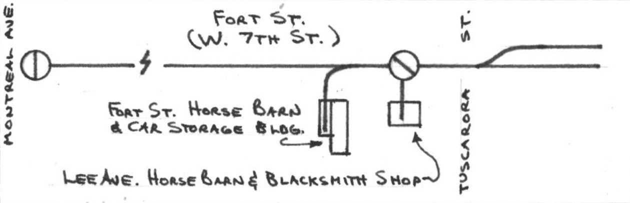
LOCATION SPECIFIED IN 1897 WEST MINNEAPOLIS ORDINANCE. (SEE MAP ON PAGE 94 OF THE BOOK.)

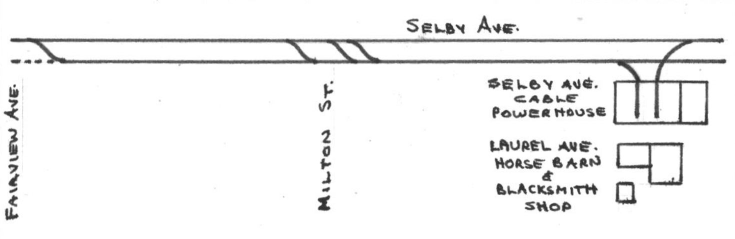

MONK AVE.
W. LAKE ST.
TYLER AVE.
WEST MINNEAPOLIS (HOPKINS)
2ND ST. N.
6TH AVE.
EXCELSIOR AVE.
MINNEAPOLIS & ST. LOUIS RY.

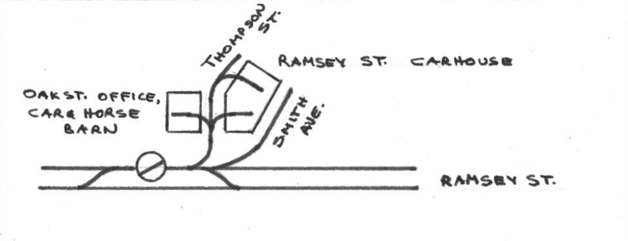
## HORSECAR AND CABLECAR TRACK- PER A.L. DRUM & CO. VALUATION

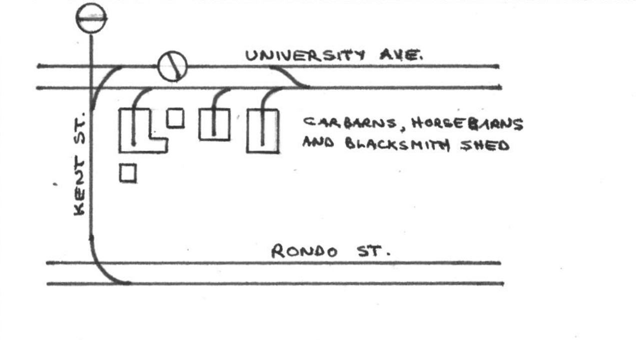

10TH ST.
W. 7TH ST.
E. 7TH ST.
ST. PETER ST.
WABASHA ST.
ROBERT ST.
JACKSON ST.
LOCUST ST.
5TH ST.
BROADWAY
4TH ST.
4TH ST.

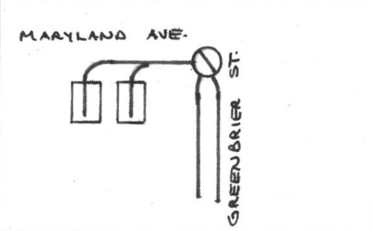

DULUTH AVE.
E. 7TH ST.

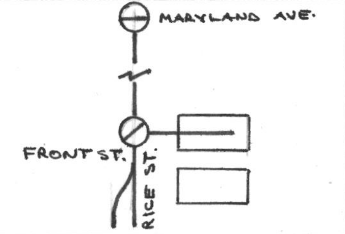

MONTREAL AVE.
FORT ST. (W. 7TH ST.)
TUSCARORA ST.
FORT ST. HORSE BARN & CAR STORAGE BLDG.
LEE AVE. HORSE BARN & BLACKSMITH SHOP


SELBY AVE.
FAIRVIEW AVE.
MILTON ST.
SELBY AVE. CABLE POWERHOUSE
LAUREL AVE. HORSE BARN & BLACKSMITH SHOP


THOMPSON ST.
RAMSEY ST. CARHOUSE
OAK ST. OFFICE, CAR & HORSE BARN
SMITH AVE.
RAMSEY ST.

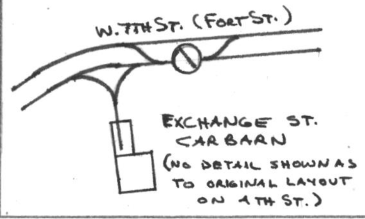

UNIVERSITY AVE.
KENT ST.
CARBARNS, HORSEBARNS AND BLACKSMITH SHED
RONDO ST.


MARYLAND AVE.
GREENBRIER ST.

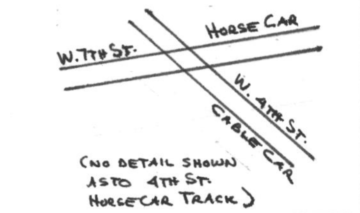

MARYLAND AVE.
FRONT ST.
RICE ST.

ALL OTHER TRACK INTERSECTIONS WERE SIMPLE. EXAMPLE:

TURNTABLES AT ENDS OF LINES WERE SHOWN AS: OR

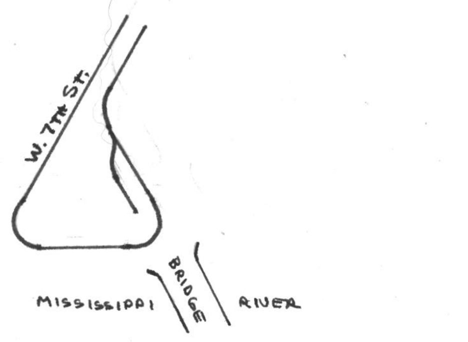

W. 7TH ST. (FORT ST.)
EXCHANGE ST. CARBARN

(NO DETAIL SHOWN AS TO ORIGINAL LAYOUT ON 4TH ST.)

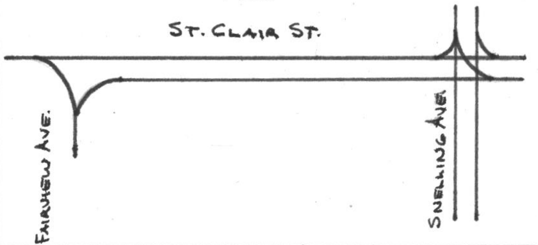

W. 7TH ST.
HORSE CAR
W. 4TH ST.
CABLE CAR

(NO DETAIL SHOWN AS TO 4TH ST. HORSECAR TRACK)

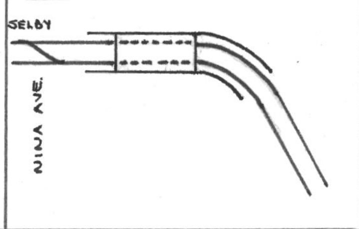
FORT SNELLING LOOP 1904


W. 7TH ST.
MISSISSIPPI
BRIDGE
RIVER

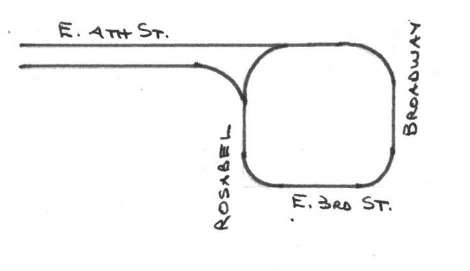
1921


ST. CLAIR ST.
FAIRVIEW AVE.
SNELLING AVE.

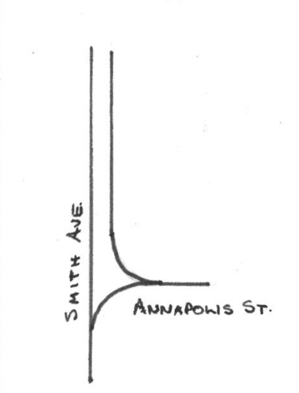
SELBY TUNNEL 1921


SELBY
NINA AVE.

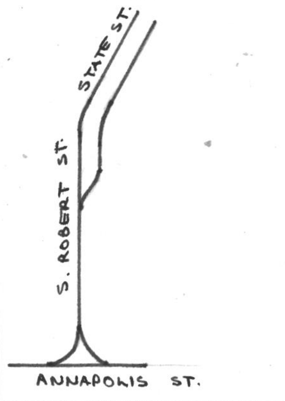
JAN. 1919


E. 4TH ST.
BROADWAY
ROSABEL
E. 3RD ST.

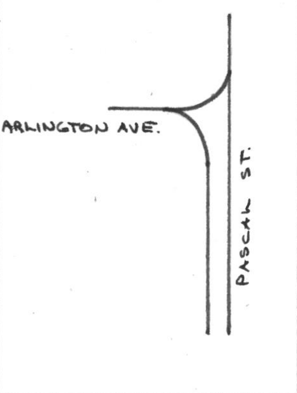
1921


SMITH AVE.
ANNAPOLIS ST.

1921

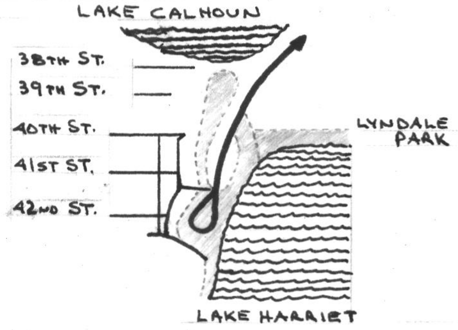

STATE ST.
S. ROBERT ST.
ANNAPOLIS ST.

1924

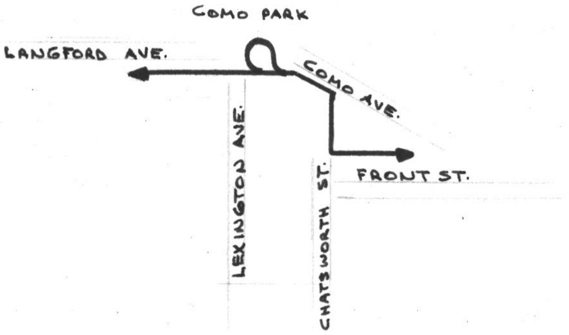

ARLINGTON AVE.
PASCAL ST.

# MISCELLANEOUS DETAILS

## MINNEAPOLIS ST. RY.
## ORIGINAL LAKE HARRIET LOOP - 1900

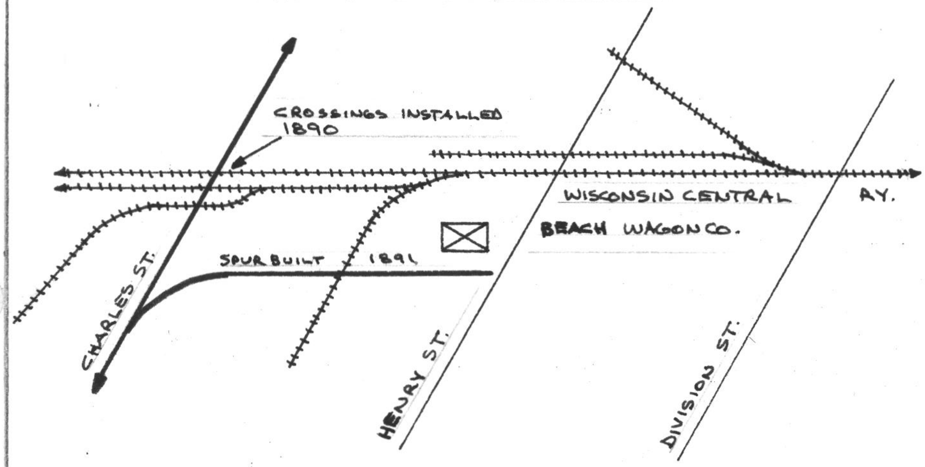

LAKE CALHOUN
38TH ST.
39TH ST.
40TH ST.
41ST ST.
42ND ST.
LYNDALE PARK
LAKE HARRIET

## ST. PAUL CITY RY.
## COMO PARK LOOP - 1900


COMO PARK
LANGFORD AVE.
COMO AVE.
LEXINGTON AVE.
CHATSWORTH ST.
FRONT ST.

## NORTH ST. PAUL R.R.

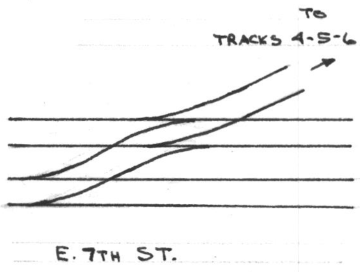
NORTH ST. PAUL 1890-1891


CROSSINGS INSTALLED 1890
WISCONSIN CENTRAL RY.
BEACH WAGON CO.
SPUR BUILT 1891
CHARLES ST.
HENRY ST.
DIVISION ST.

## ST. PAUL CITY RY.

E. 7TH ST. STATION

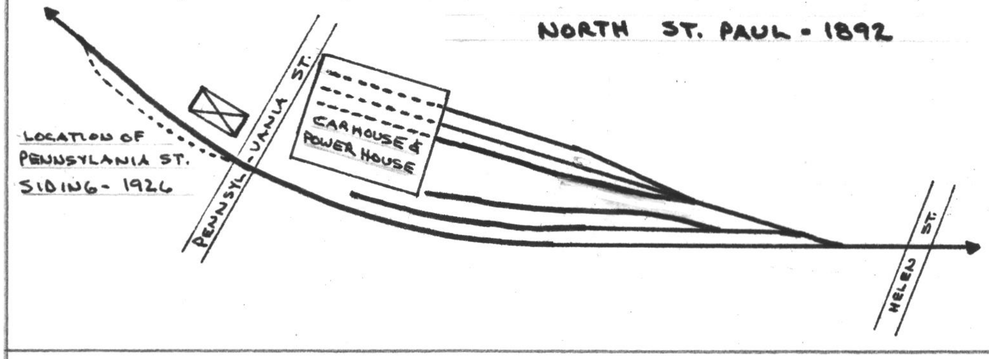
(PAGE 126)


TO TRACKS 4-5-6
E. 7TH ST.

CORRECT LAYOUT OF CROSSOVER ON E. 7TH ST.

## ST. PAUL & WHITE BEAR R.R.

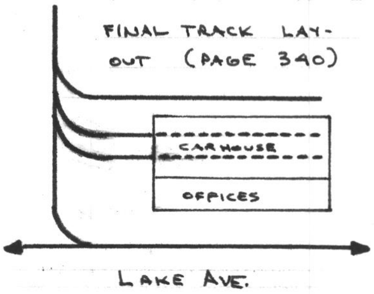
NORTH ST. PAUL - 1892

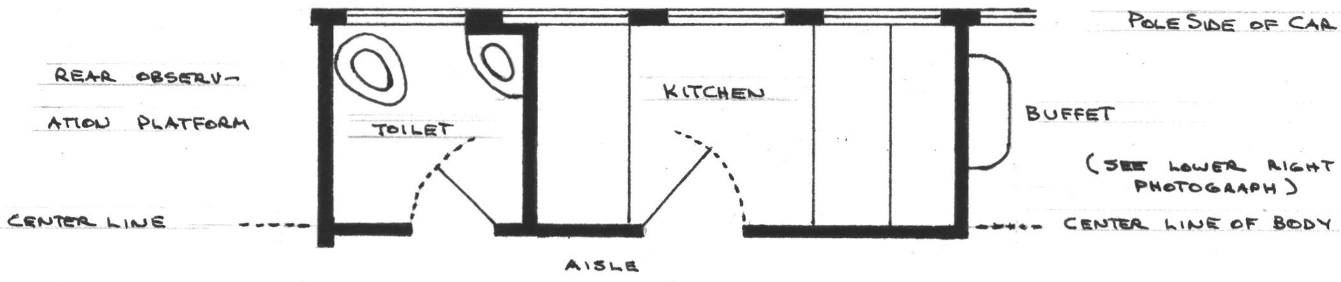

LOCATION OF PENNSYLANIA ST. SIDING - 1926
PENNSYLVANIA ST.
CARHOUSE & POWER HOUSE
HELEN ST.

## DULUTH ST. RY.

PARK POINT CARHOUSE

FINAL TRACK LAYOUT (PAGE 340)


CARHOUSE
OFFICES
LAKE AVE.

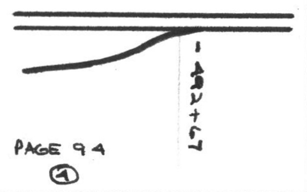

POLE SIDE OF CAR
REAR OBSERVATION PLATFORM
TOILET
KITCHEN
BUFFET
(SEE LOWER RIGHT PHOTOGRAPH)
CENTER LINE
CENTER LINE OF BODY
AISLE

T.C.R.T. CO. - THOMAS LOWRY'S PRIVATE CAR - INTERIOR DETAIL (PAGE 244)

# LAKE MINNETONKA DIVISION TRACKAGE DETAILS - 1

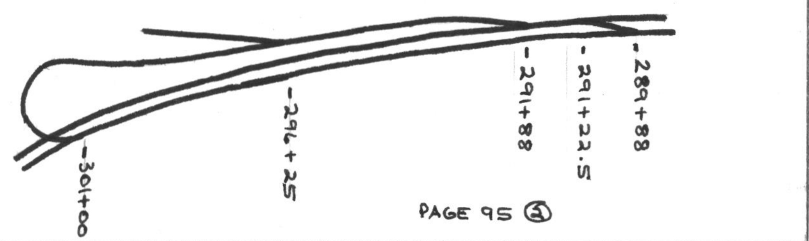
## HOPKINS

## GRAVEL PIT SPUR



-492+67
PAGE 94
④

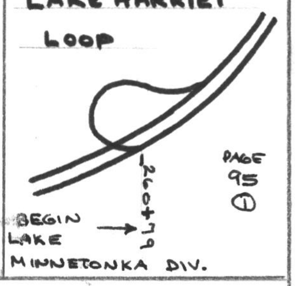
## FRANCE AVE. LOOP (ORIGINAL)



-301+00
-296+25
-291+88
-291+22.5
-289+88
PAGE 95 ③

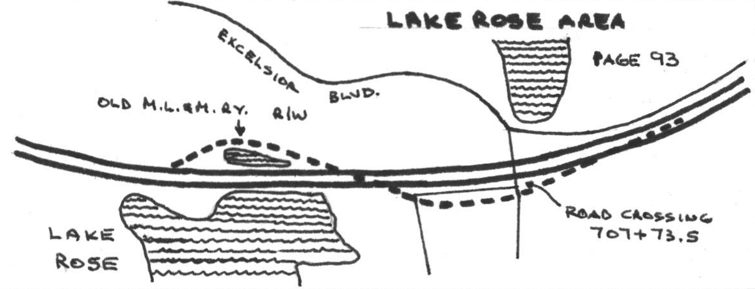
## LAKE HARRIET

## LOOP



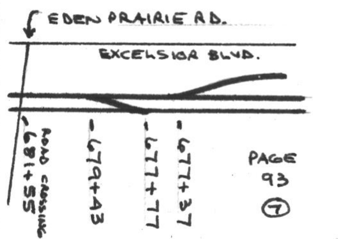
-260+79
BEGIN LAKE MINNETONKA DIV.
PAGE 95
①

## LAKE ROSE AREA



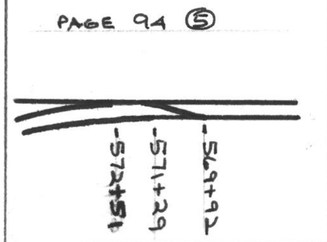
PAGE 93
EXCELSIOR BLVD.
OLD M.L.&M. RY. R/W
ROAD CROSSING 707+73.5
LAKE ROSE

## GLEN LAKE SPUR



EDEN PRAIRIE RD.
EXCELSIOR BLVD.
ROAD CROSSING 681+55
-679+43
-677+77
-677+37
PAGE 93
⑦

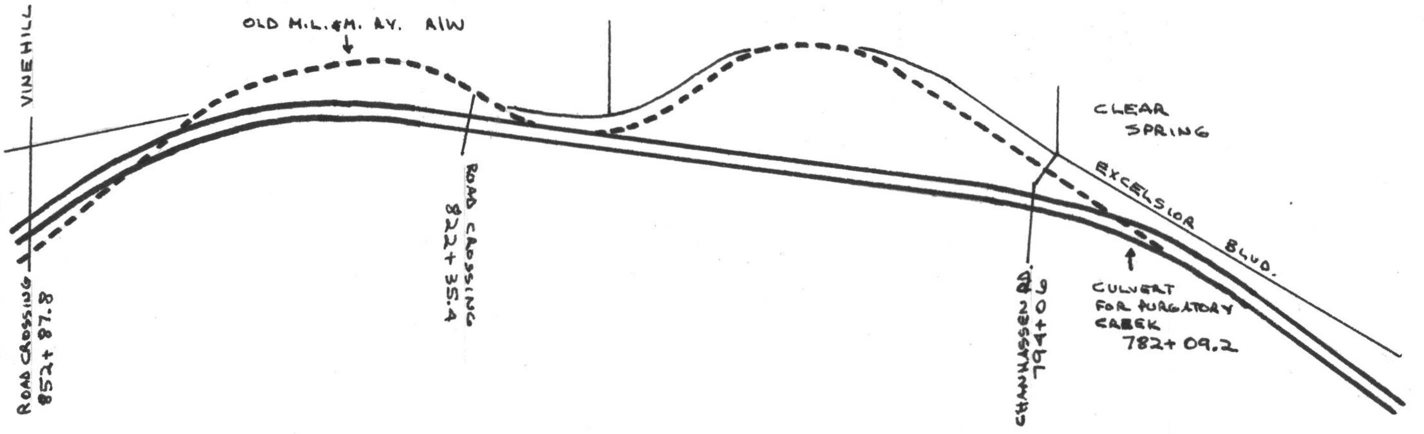
## DEEPHAVEN JCT.



PAGE 94 ⑤
-572+51
-571+29
-569+92

## CLEAR SPRING TO VINEHILL

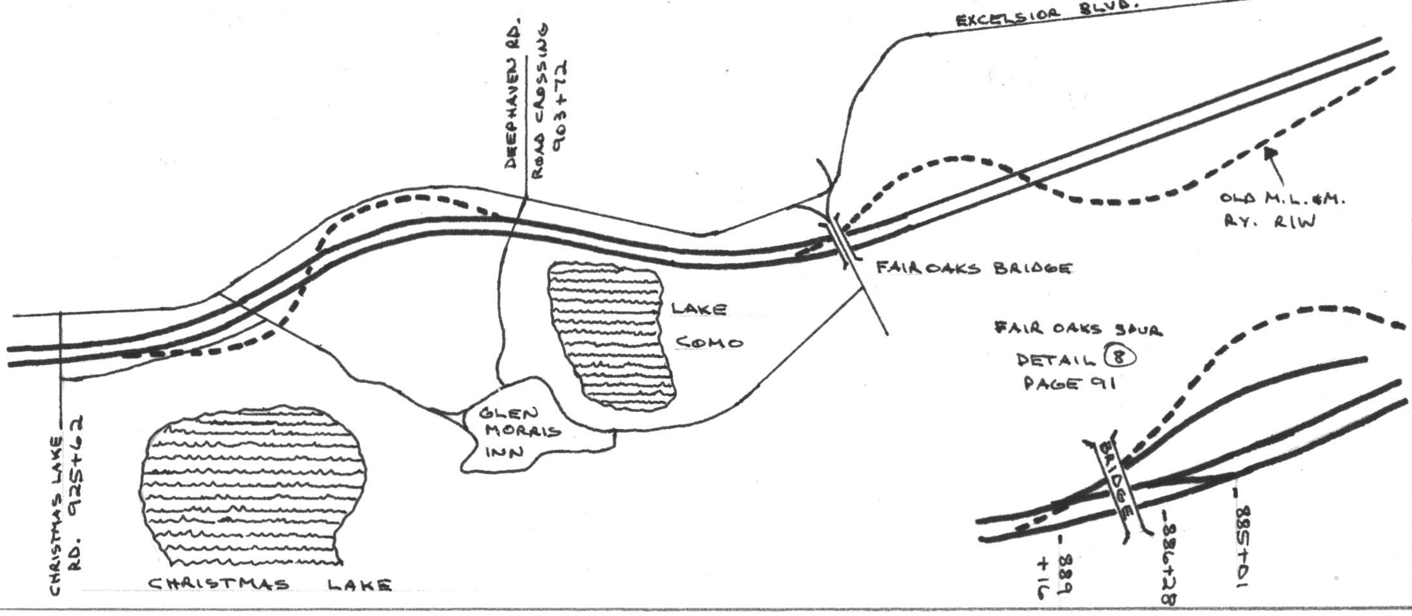
PAGES 91 AND 93



VINEHILL RD.
OLD M.L.&M. RY. R/W
CLEAR SPRING
EXCELSIOR BLVD.
ROAD CROSSING 852+87.8
ROAD CROSSING 822+35.4
CHANHASSEN RD. 794+06
CULVERT FOR PURGATORY CREEK 782+09.2

## VINEHILL TO CHRISTMAS LAKE

PAGE 91

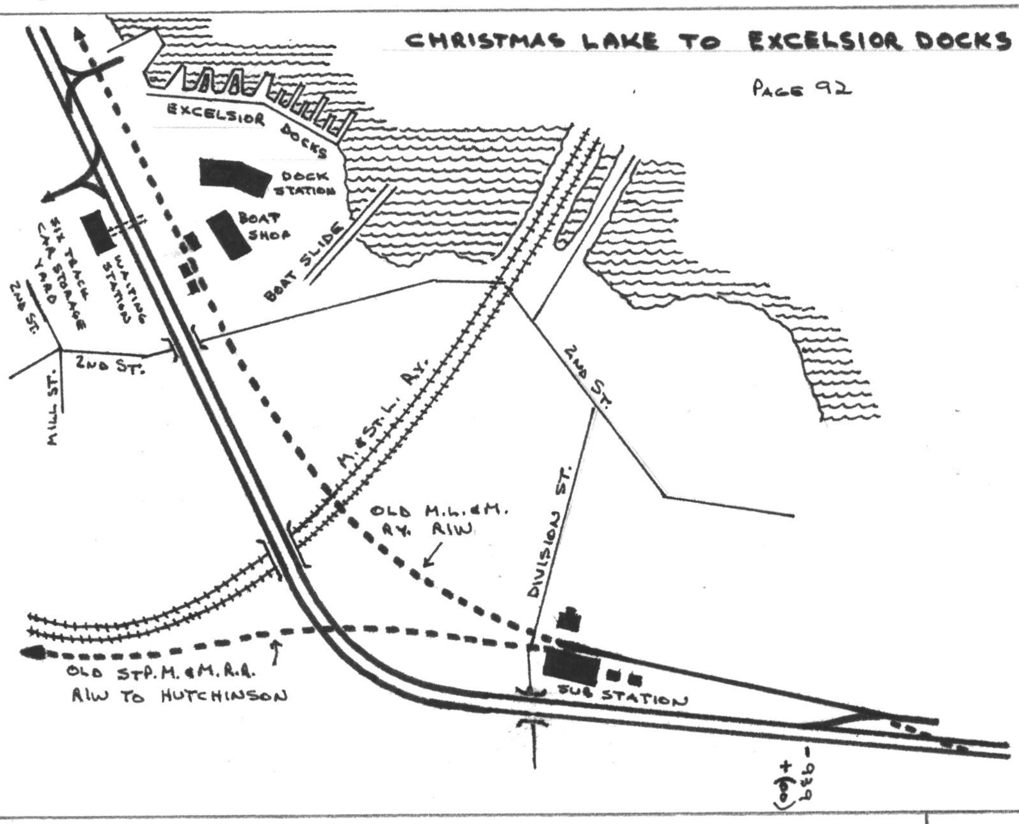


EXCELSIOR BLVD.
DEEPHAVEN RD.
ROAD CROSSING 903+72
OLD M.L.&M. RY. R/W
FAIR OAKS BRIDGE
LAKE COMO
GLEN MORRIS INN
CHRISTMAS LAKE RD. 925+62
CHRISTMAS LAKE
FAIR OAKS SPUR DETAIL ⑧ PAGE 91
BRIDGE
-889+16
-886+28
-885+01

# LAKE MINNETONKA DIVISION TRACKAGE DETAILS - 2

## CHRISTMAS LAKE TO EXCELSIOR DOCKS

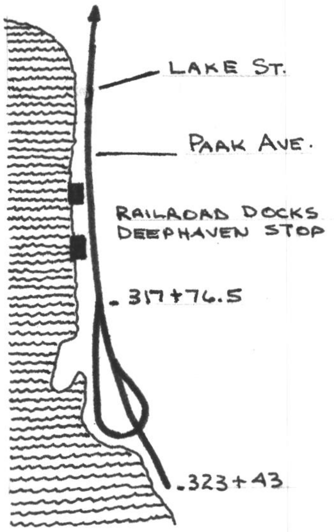
PAGE 92


EXCELSIOR DOCKS
DOCK STATION
BOAT SHOP
BOAT SLIDE
SIX TRACK CAR STORAGE YARD
WAITING STATION
2ND ST.
2ND ST.
MILL ST.
2ND ST.
M.&ST.L. RY.
OLD M.L.&M. RY. R/W
DIVISION ST.
OLD STP.M.&M.R.R. R/W TO HUTCHINSON
SUB STATION
939+(00)

## DEEPHAVEN LOOP

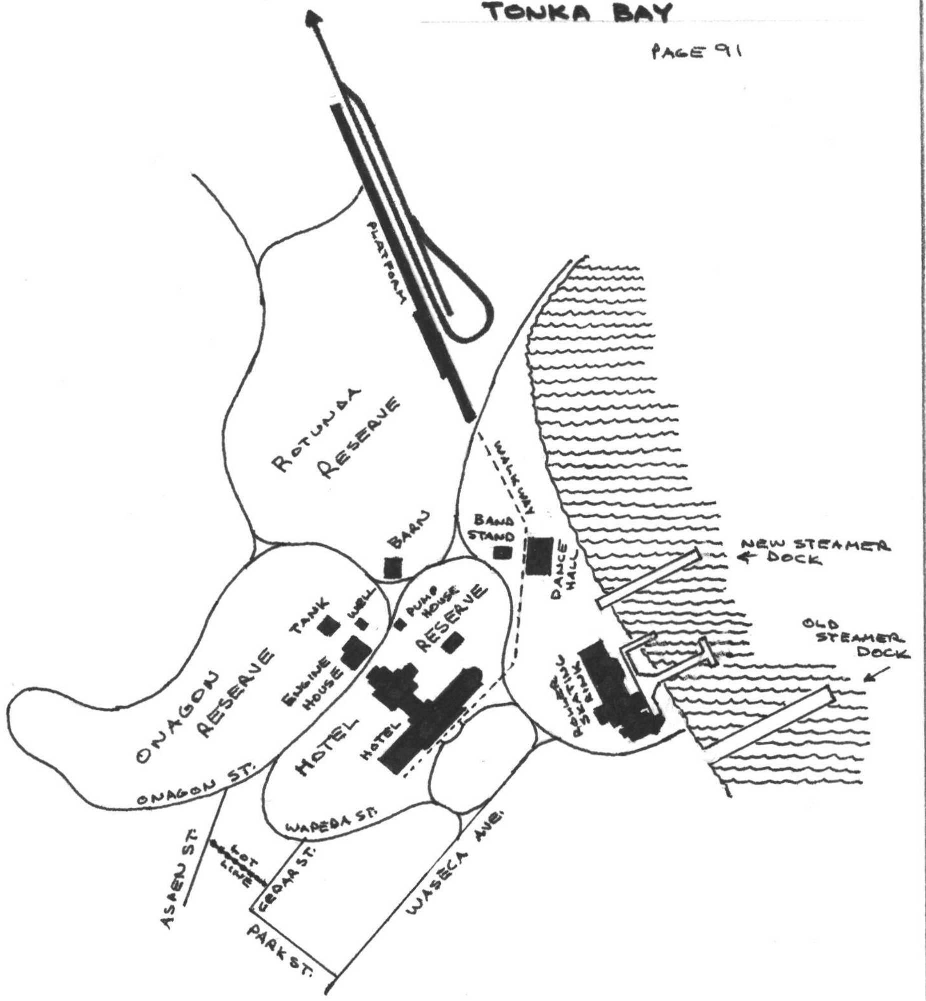
PAGE 93 ⑥

DEEPHAVEN JCT. = 0+00
(M.&ST.L. RY. CROSSING = 140+08)


LAKE ST.
PARK AVE.
RAILROAD DOCKS DEEPHAVEN STOP
317+76.5
323+43

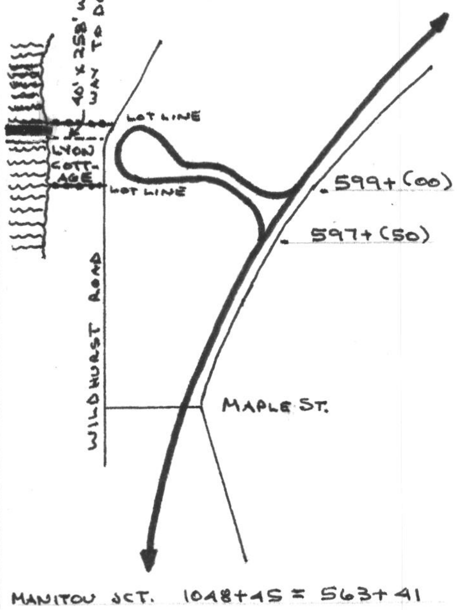
## TONKA BAY

PAGE 91


PLATFORM
ROTUNDA RESERVE
WALKWAY
BAND STAND
DANCE HALL
BARN
NEW STEAMER DOCK
OLD STEAMER DOCK
TANK
WELL
PUMP HOUSE
RESERVE
ENGINE HOUSE
ROLLER SKATING RINK
ONAGON RESERVE
HOTEL
HOTEL
ONAGON ST.
WAPEDA ST.
ASPEN ST.
LOT LINE
CEDAR ST.
WASECA AVE.
PARK ST.

## WILDHURST LOOP

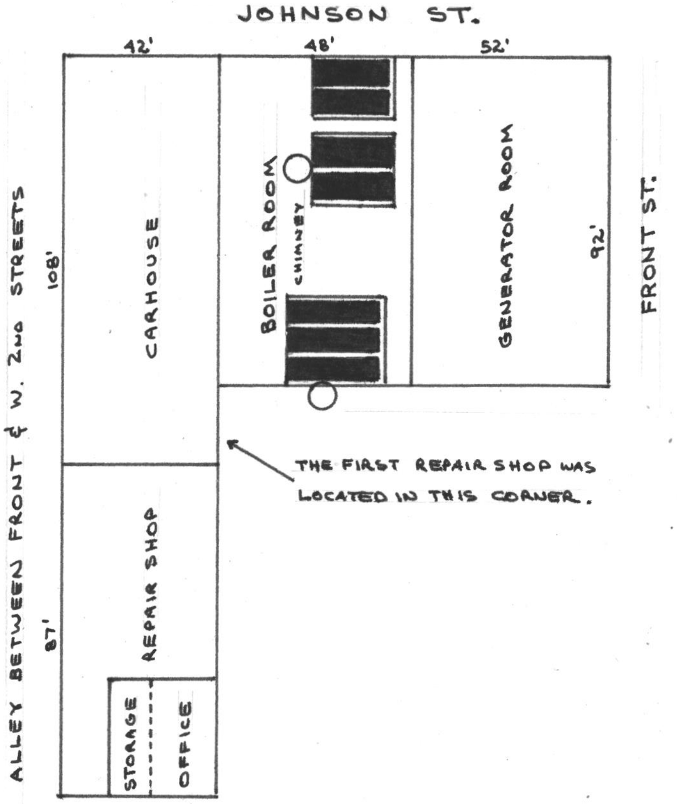
PAGE 91 ⑩


40' x 258' WALKWAY TO DOCK
LOT LINE
LYON COTTAGE
LOT LINE
599+(00)
597+(50)
WILDHURST ROAD
MAPLE ST.

MANITOU JCT. 1048+45 = 563+41

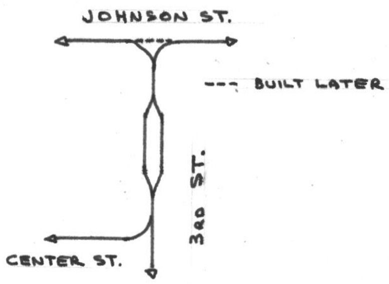
# WINONA RY. & LIGHT CO.

## CARHOUSE & POWERHOUSE


JOHNSON ST.
42'
48'
52'
CARHOUSE
BOILER ROOM
CHIMNEY
GENERATOR ROOM
92'
FRONT ST.
108'
ALLEY BETWEEN FRONT & W. 2ND STREETS
87'
REPAIR SHOP
STORAGE
OFFICE

THE FIRST REPAIR SHOP WAS LOCATED IN THIS CORNER.

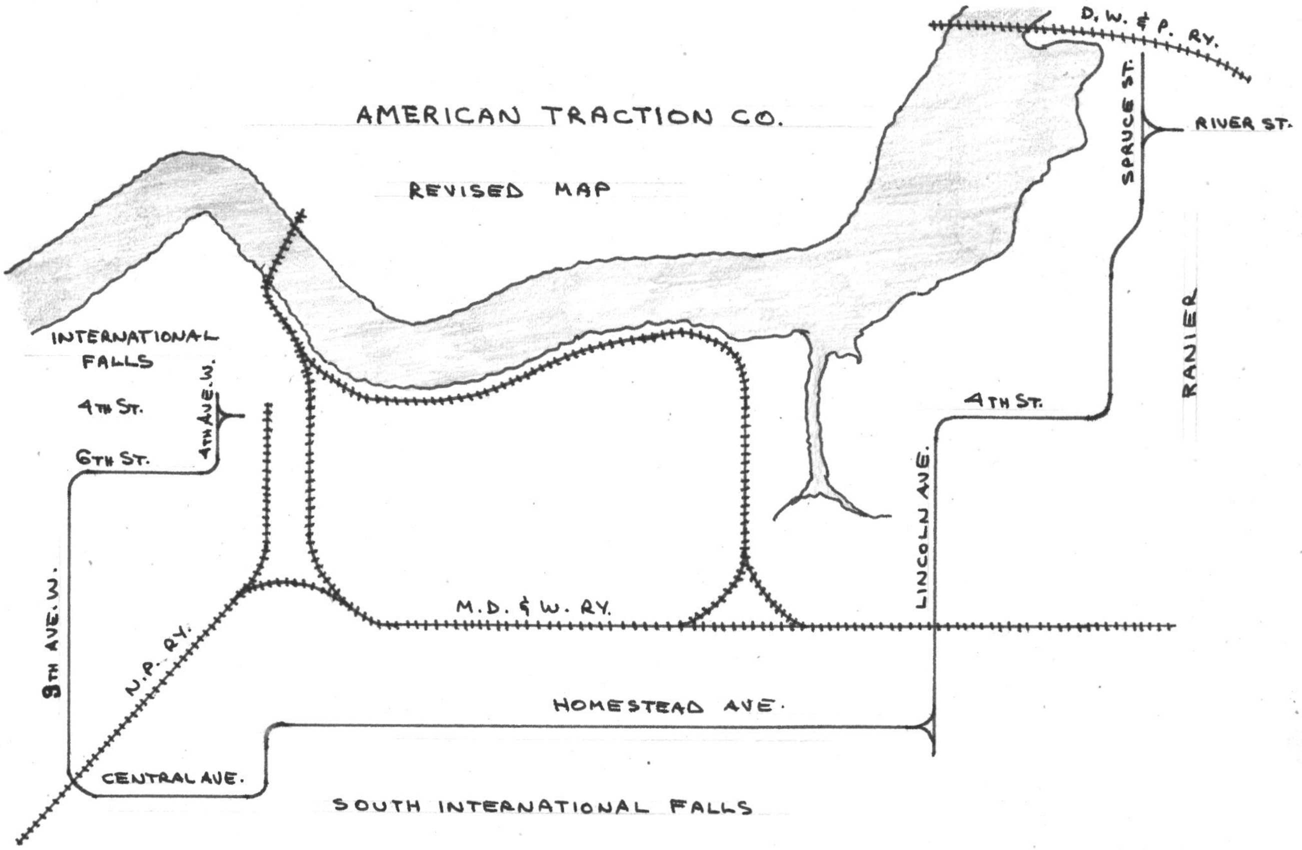
1893


JOHNSON ST.
3RD ST.
CENTER ST.

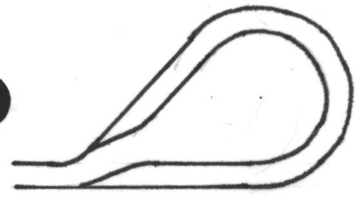
--- BUILT LATER

## AMERICAN TRACTION CO.

REVISED MAP


D. W. & P. RY.
SPRUCE ST.
RIVER ST.
RANIER
INTERNATIONAL FALLS
4TH ST.
4TH AVE. W.
6TH ST.
4TH ST.
LINCOLN AVE.
M. D. & W. RY.
9TH AVE. W.
N. P. RY.
HOMESTEAD AVE.
CENTRAL AVE.
SOUTH INTERNATIONAL FALLS

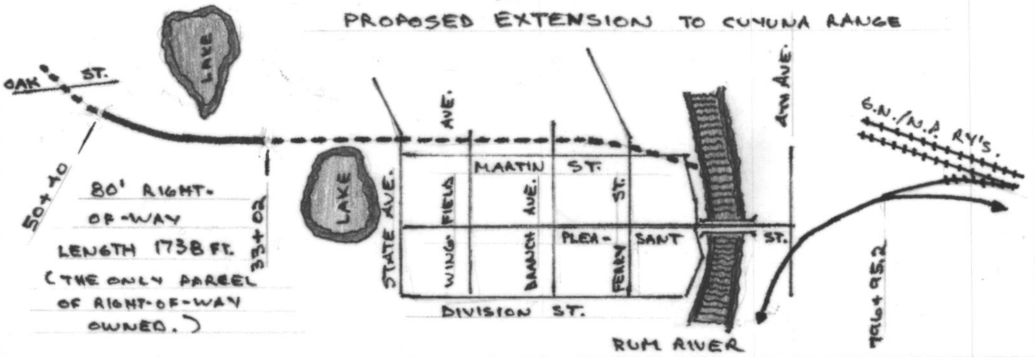
## ST. PAUL CITY RY.



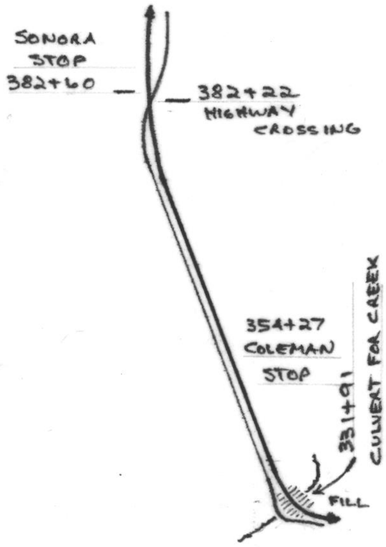
PHALEN PARK LOOP

## MINNEAPOLIS ANOKA & CUYUNA RANGE RY. NOVEMBER, 1929

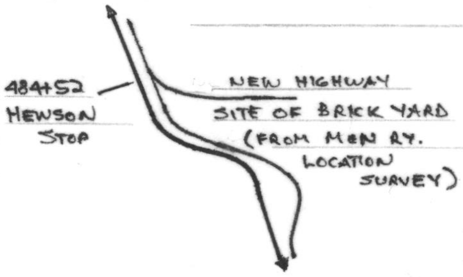
### ANOKA
### PROPOSED EXTENSION TO CUYUNA RANGE


OAK ST.
LAKE
LAKE
50+40
80' RIGHT-OF-WAY
LENGTH 1738 FT.
(THE ONLY PARCEL OF RIGHT-OF-WAY OWNED.)
33+02
STATE AVE.
WINGFIELD AVE.
BRANCH AVE.
PERRY ST.
MARTIN ST.
PLEASANT ST.
DIVISION ST.
RUM RIVER
4TH AVE.
G.N./N.P. RY'S.
796+95.2

## MAP CORRECTION

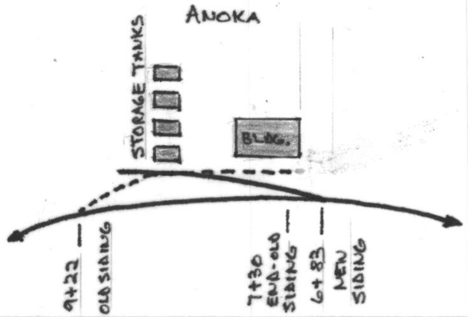

SONORA STOP
382+60
382+22 HIGHWAY CROSSING
354+27 COLEMAN STOP
331+91 CULVERT FOR CREEK
FILL

## BRICK YARD SPUR LOCATION 1913-1917

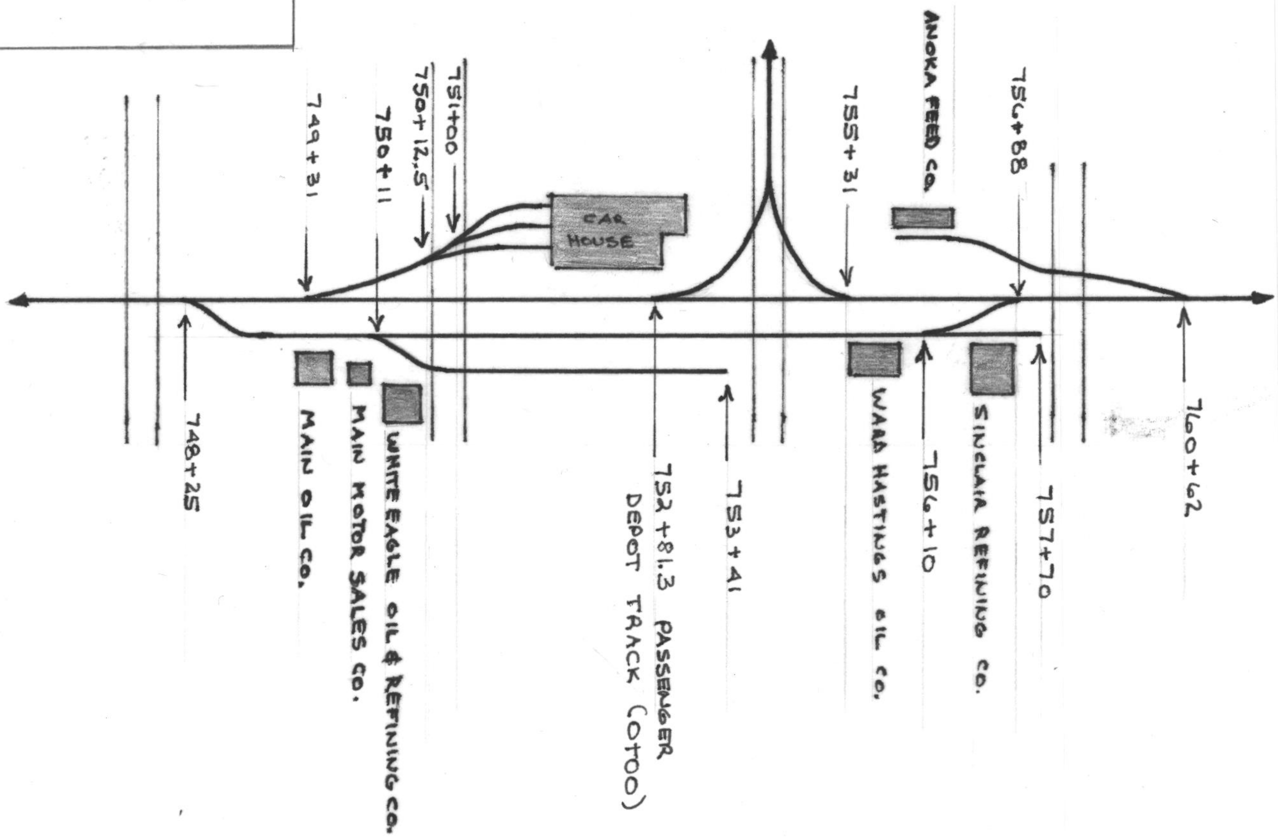

484+52
HEWSON STOP
NEW HIGHWAY
SITE OF BRICK YARD
(FROM M&N RY. LOCATION SURVEY)

## PHILLIPS PETROLEUM CO. SIDING RELOCATION

ANOKA


STORAGE TANKS
BLDG.
9+22 OLD SIDING
7+30 END-OLD SIDING
6+83 NEW SIDING

## ANOKA CARHOUSE TRACK DETAILS


749+31
750+11
750+12.5
751+00
CAR HOUSE
ANOKA FEED CO.
755+31
756+88
748+25
MAIN OIL CO.
MAIN MOTOR SALES CO.
WHITE EAGLE OIL & REFINING CO.
752+81.3 PASSENGER DEPOT TRACK (0+00)
753+41
WARD HASTINGS OIL CO.
756+10
SINCLAIR REFINING CO.
757+70
760+62

# TCRT MAT'LS @ MHS

# TCRT HISTORICAL RECORDS

## Corporate Minute Books

Minneapolis St. Ry.
   5 volumes  1873 - 1959
St. Paul St. Ry.
   1 volume   1872-1877
St. Paul City Ry.
   4 volumes  1878-1927, 1956-1958 (1928-1955 not included)
Minneapolis, Lyndale & Minnetonka Ry.
   2 volumes  1878-1888, 1889-1929
   2 volumes  Stock Journal and Stock Ledger
Minneapolis & St. Paul Suburban Ry./R.R.  1899-195?
Minnetonka & White Bear Navigation Co.  1910-1951
Rapid Transit Real Estate Corp.  1915-1958
Stenographer's shorthand notebooks
   TCRT Board of Directors Minutes 1-1954 to 3-1959

NOTE: NO minute books for Twin City Rapid Transit Co. were included in the donation. Minnesota Enterprises Inc. was allowed first choice by MTC at MEI's request. Presumably the missing SPCR book was also involved. Goodrich Lowry was reportedly unsuccessful in confirming this with MEI in 1977-1978.

## Construction Cost & Property Valuation

Real Estate Deed record books
   2 volumes
~~Real Estate Deeds (incomplete)~~
   ~~Mahtomedi right-of-way  1890-1903  4 folders~~
   ~~Minnetonka right-of-way 1880-1923  2 folders~~
Construction Journals  1901-1912, 1914-1928
Report on MSR Capital Expenditures 1-1-1916 to 12-31-1918
   by Bion J. Arnold    1 volume
~~Inventory and Valuation of MSR as of 1-1-1916~~
   ~~F. W. Cappelen     8 volumes~~
   ~~A. L. Drum & Co.   9 volumes~~
~~Report of the Value of the Property of SPCR as of 1-1-1920~~
   ~~A. L. Drum & Co.   6 volumes~~
~~Report of the Value of the Property of ____ as of 1-1-1922~~
   ~~MSR  A. L. Drum & Co.    4 volumes~~
   ~~SPCR A. L. Drum & Co.    2 volumes~~
Report of the Value of the Property as of 1-1-1925 showing Original Cost and Commission Fair Value segregated into ICC Classification of Accounts by A. L. Drum & Co.
   MSR 11 volumes  (two sets)
   SPCR 9 volumes  (one set)
   M & St.P Suburban R.R. (also showing 1912-1921 Reproduction Cost):
     3 volumes: Minnetonka, Stillwater, and Suburban Local

## Divisions

? Condensed Reports of the 1-1-1922 Valuation
  MSR  1 folder
  SPCR  1 folder
? Condensed Valuation Reports of Various Dates
  7 folders
? Valuation Reports-File Indexes
  2 volumes
  7 folders
Valuation Record Additions 1925-1949, 1955-1961
Index to Track/Overhead Valuation Records (by street) 1925-1948
Property Additions and Deletions
  1950  3 folders (MSR) (SPCR) (M&SP Sub'n)
  1951  3 folders
  1952  2 folders (SPCR missing; MEI responsible? This was the year all SPCR local lines were abandoned.)
  1953  3 folders
  1954  3 folders
~~Contracts/Bills of Sale (incomplete) 1951-1952~~
TCRT 1959 Appraisal Book ( 3 copies)

## Miscellaneous Documents

~~SPCR History compiled from newspaper accounts by Track Dept.~~
~~List of Property Not Needed 1894~~ destroyed   all others to MTM (Aaron Isaacs) 1992)
~~1902 U.S. Census (12-31-1901)~~
~~1907 U.S. Census (12-31-1907)~~
~~Cancelled Check TCRT to A. B. Robbins 1906 $30,000~~

## Legal Department Files

| File No. | Description |
|---|---|
| 167 | Articles of Incorporation<br>Minneapolis Horse R.R. 1867 |
| 174 | Articles of Incorportion<br>Duluth St. Ry.; Duluth-Superior Traction Co.; plus other documents dating to 1929. |
| 175 | Lyndale Railway Co. |
| 245 | Minneapolis St. Ry. Ordinances and Resolutions 1872-1925 five folders |
| 247 | St. Paul City Ry. Ordinances and Resolutions 1872-1925 four folders |
| 248 | Phalen Park Ordinances |
| 251-262 | M. & St.P. Suburban R.R. Ordinances and Resolutions 12 folders; one for each municipality. |
| 285 | Fort Snelling Reservation |
| 279, 281, 282, 286 | Railroad Crossing Permits |
| 301-308 | St. Anthony Falls Water Power Co., Minneapolis Mill Co. General Electric Co.: Contracts, Leases, Reports, Correspondence |
| R280 | Land Value Appraisals, Descriptions and Plats 5-1-1915 for MSR and SPCR. |

## Right-of-Way/Track Maps

Lake Minnetonka Division
  Lake Harriet Loop to Tonka Bay and Deephaven
Stillwater Division
  Duluth Ave. to Stillwater, Bayport, White Bear and Mahtomedi
Tonka Bay Hotel Property
~~Sanborn Insurance Real Estate Plat Books 1916~~
  ~~Minneapolis~~
  ~~St. Paul~~ To MTM (Aaron Isaacs) 1993
Motor Line
  Hopkins
  50th St. & Nicollet Ave.
Proposed Powerhouse Location 8-1902
Como Sand Pit 12-1914
CGW Ry. Klondike Spur, South St. Paul
Proposed loop at 42nd Ave. N. & Washington Ave. N. 8-1914
Nicollet Station 2-1947
Inter-Campus line
  Como Ave. & Eustis to the Farm Campus
Fort Snelling (including the Motor Speedway)
  three maps
Wildwood Park
  Real Estate: two maps
SPCR Special Work Diagram Book

## Equipment

~~Three file drawers of 4" x 6" cards, one for each piece of equipment owned from 1904 to 1949, including cars built for Duluth St. Ry.~~
Equipment Diagram books (two different sets)
Two Car Train Booklet 10-1921 (cars 2002-2003)
~~PCC Equipment List (300-339)~~ } to GKI
~~PCC Equipment List (390-439)~~
~~PCC Specification Book 8-2-1945 (340-389)~~ to GKI 1993
1952 Correspondence of F.S. Morgan, Supt. Power & Equipment

## Employment Bureau Records

Eleven record storage boxes of 4" x 6" cards, one for each employee hired, from late 1890's to late 1940's.
Appointment Record books
  8 volumes 1914 to 1925
Seniority record books
  1 volume 4-1-23 by badge number
  1 volume 1-1-46 by badge number
  ~~1 volume women operators 1943-1954~~ To MTM (Aaron Isaacs) 1993
NOTE: The foregoing records apply only to motormen, conductors and bus drivers.

## Financial Reports

Booklet on TCRT Refinancing 1927
TCRT Annual Reports
  1920, 1925, 1927, 1928, 1931-1936, 1938-1942, 1944-1948, 1950-1960
DSTC Annual Reports
  1917, 1918, 1919, 1922, 1923, 1925-1929, 1934-1940, 1946, 1952
MEI Annual Reports
  1962, 1963, 1965-1967

## ~~Power Generating Equipment Specifications~~

~~Steam Generating Unit 1940~~
~~Babcock & Wilcox Boilers 1945-1946~~
~~G.E. Turbine Generator 1945-1946~~
~~G.E. Ignitron Arc Rectifier 1945-1946~~

## Bus Spefications and Drawings

| Manufacturer | TCL Numbers | Date |
|---|---|---|
| Yellow Coach | 416-430 | 1934-1935 |
| Mack CW | 431-435 | 1935 |
| Mack CQ | 436-443 | |
| Mack CQ | 444-449 | 1937 |
| Ford Transit | 450-451 | 1937 (incl. photographs) |
| Mack CW | 452-454 | 1937 |
| Mack CY | 462-482 | 1938 |
| Mack CY | 483-487 | 1939 |
| Yellow Coach | 488-492 | 1939 |
| Mack L25 | 493-495 | |
| White | 514-517 | |
| Mack LC | 537-546 | |
| Mack LC | 557-561 | |
| Mack C41 | 647-686 | |

## OTHER HISTORICAL RECORDS

### Electric Railways

Minneapolis Anoka & Cuyuna Range Ry.
  ~~Accounting Journals 1923-1925~~
  Report to the Saco & Biddeford Savings Institution 11-1925
    by Franklin R. Chesley
  Right-of-Way/Track Maps 11-1929
  Minneapolis & Northern Ry. location survey map
Central Warehouse Co. track map
~~Joe Shannon Collection: books, magazines, clippings, route maps and public timetables from and about U. S. companies.~~ To MTM 1993

# Drafting Paper Sizes

| Letter | Multiples of $8\frac{1}{2} \times 11$ | Multiples of $9 \times 12$ |
|---|---|---|
| A | $8\frac{1}{2} \times 11$ | 9 × 12 |
| B | 11 × 17 | 12 × 18 |
| C | 17 × 22 | 18 × 24 |
| D | 22 × 34 | 24 × 36 |
| E | 34 × 44 | 36 × 48 |

## Rulers

Architect's scale: 12 units to the foot
Engineer's scale: 10 units to the inch

## Drawing Paper Sizes

| | | | |
|---|---|---|---|
| A | $8\frac{1}{2} \times 11$ | 210x297 MM | A4 |
| B | 11 x 17 | — | — |
| C | 17x 22 | 420x594 MM | A2 |
| D | 22 x 34 | 594x 841 MM | A1 |
| E | 34 x 44 | 841 x 1189 MM | A0 |
| | 11x14 | 297x420 MM | A3 |

Other sizes :

8x10
8x11
* 9x12
* 12x18
14x17
15x20
* 18x24
19x24
21x27
* 24x36
* 36x48

* most commonly used

Squared Paper

- 4, 8, 16, 32 squares per 1"
- 10, 20, 30 or more sq per 1"

RUSSELL L. OLSON
8212 Sheridan Ave. So.
Bloomington, Minn. 55431

The majority of the tracings and prints have a drawing number in the format 36B2524. The first set of num erical characters is a category or series number. The next alphabetical character indicates the size of the drawing.

A = 8 1/2" wide x variable lengths
B = 12" wide x variable lengths
C = 18" wide x variable lengths
D = 24" wide x variable lengths
E = 36" wide x variable lengths

The next four numerical characters are the individual drawing number.

On the following pages the category or series number and title are centered. The alphabetical character in the first column is the drawing size letter. The numerical characters in the next column are the individual drawing numbers. The description is the title as it appears on the drawing. The date of the drawing in the next-to-last column is stated in MM-YY format. The small alphabetical character in the last column is the type of drawing.

v = drafting vellum
w = white print
b = blue print
p = drafting paper

AVERY® C
PV119F

# TWIN CITY RAPID TRANSIT CO.

## MECHANICAL DEPT. TRACINGS AND PRINTS

### Single Truck Passenger Cars

| | | | | |
|---|---|---|---|---|
| 332 | 2-6130 | Mpls. St. Ry. Grip Car #305 | 1-88 | w |
| 334 | 2-6135 | Mpls. St. Ry. Summer Car #369 | 2-90 | w |
| 336 | 2-6134 | Mpls. St. Ry. Closed Car #365 | 2-90 | v |
| | | 22 Ft. Car With Safety Gate | 12-96 | w |

### Standard Double Truck Cars 1898-1900

| | | | |
|---|---|---|---|
| D22#6 | Elevation & Section 10-6-1898 | 10-98 | v |
| | Elevation & Section 10-6-1900 | 10-00 | w |
| | Elevation & Section (37 ft. Car) 2-23-1900 | 2-00 | w |

### Early Tracings

| | | | | |
|---|---|---|---|---|
| A48#1 | 9-97 | Weight Distribution on Axles | 9-99 | v |
| B24#5 | 4-564 | Westinghouse Magnetic Brakes | 11-02 | v |
| B40#1 | 6-431 | Brake Work 37 ft. Cars | 10-04 | v |
| D39#2 | 6-4162 | Diagram of Car DImensions | 5-01 | v |
| D45#2 | 6-443 | General Dimensions-Steel Flat Cars | 3-02 | v |
| G2#11 | 2-6145 | Platform Rheostat | 5-93 | v |
| G3#11 | 2-6144 | Platform Rheostat | 5-91 | v |
| G4#11 | 2-6143 | Platform Rheostat | 5-93 | v |
| G5#11 | 2-6142 | Series Multiple Rheostat | 5-92 | v |
| G19#7 | 4-5147 | Wiring Diagram Sprague Motors | 12-91 | v |
| G20#7 | 4-5148 | Wiring Diagram T.H. SRG Motors | 12-91 | v |
| G28#11 | 2-6148 | Series Multiple Rheostat and Outside Resistance for WP Motors | 9-95 | v |
| G59#3 | 9-912 | Car Wiring 2 GE 57 / K-11 | 3-99 | v |
| G60#3 | 9-910 | Car Wiring 4 GE 57 / K-14 | 3-01 | v |
| G61#3 | 9-911 | Car Wiring 4 GE WP / K-6 | 3-01 | v |
| J6#11 | 2-6160 | Sprague #6 Motor (240) | 4-93 | v |
| J6#11 | | Sprague #6 Motor (239) | 4-93 | v |
| J36#7 | | Thomson-Houston WP Motor (134) | 11-92 | v |
| J60#3 | 8-3103 | GE 57 Motor | 10-00 | v |
| J92#3 | 6-4240 | Data of Motors | 11-94 | v |
| K65#4 | | Data on Car Equipment | 5-01 | v |
| | 6-4231 | Resistance Diagram Selby Hill Car | 10-04 | v |
| | | K-28 Controller | | v |

### Car Elevations

| | | | |
|---|---|---|---|
| D43#10 | Floor Plan for Work Car | 2-02 | v |
| D51#6 | Floor Plan for 45 Ft. Car | 3-03 | w |
| D53#6 | Details of 45 Ft. Car | 9-03 | w |
| D63#6 | Underframe of 45 Ft. Car 1904 | 2-04 | w |
| 1-666 | Cab for Wire Car | 4-05 | v |
| 1-677 | Details of Delivery Car | 9-05 | v |
| 1-6305 | Rear Part of Upper Deck Double Deck Car 1145 | 2-06 | b |
| 4-568 | Bemis Trucks-Electric Dept. Work Car | | v |
| 10-702 | Double Deck Car 1092 | 4-04 | b |
| 10-706 | Post Locations/Bumper Const./Steel Underframe Car 1905 | 4-08 | w |
| 10-711 | Delivery Car | 8-05 | w |
| 10-713 | Bulkhead Plans & Sections 46′ 9 5/8" Car | 10-?? | w |
| 6-4264 | Outline of 46′ 95/8" Car | 2-06 | v |

## 15 Series-Boats

| | | | |
|---|---|---|---|
| C 762 | Boatways Track | 10-06 | v |
| 809 | Boatways Hoist | 10-06 | v |
| 811 | Pilot Wheel for Express Boat | 3-08 | v |
| | | | |
| E 2250 | Express Boat - Twin Screws | 12-14 | w |
| 2263 | Express Boat 73 Ft. | 2-15 | w |
| 2266 | Express Boat Sections 73 Ft. | 2-15 | w |
| 2531 | Tug & FIre Boat | 2-17 | w |

## 10 Series-Axles

| | | | |
|---|---|---|---|
| B 202 | Axles for GE 73C Motors | 11-08 | v |
| 203 | Axles for GE 67 Motors | 11-08 | v |
| 204 | Axles for GE 57A Motors | 11-08 | v |
| 205 | Axles for GE 216 Motors #4 Truck | 6-09 | v |
| 206 | Axles for GE 73C Motors | 11-10 | v |

## 20 Series-Gongs,Bells,Horns,Whistles

| | | | |
|---|---|---|---|
| B 545 | Whistle Handle | 5-09 | v |
| 3547 | Pneumatic Gong Ringer | 6-27 | v |
| 4240 | Air Horn For Fast Cars | 12-30 | v |
| 4341 | Gong-Chime for Suburban Cars | 6-31 | v |

## 21 Series-Air Brake Piping

| | | | |
|---|---|---|---|
| A 1043 | GE 10" Brake Cylinder | 2-10 | v |
| 6242 | Door Engine Connections | 9-44 | p |
| | Piping Layout Coasting Recorder Relay | | v |
| | | | |
| B 3388 | Air Piping 2004-2005 | 4-26 | v |

| | | | | |
|---|---|---|---|---|
| | 4238 | Foot Lever Control 2000-2030 | 11-30 | v |

| | | | | |
|---|---|---|---|---|
| C | 2962 | Air Piping-Standard Front Exit Cars | 4-22 | v |
| | 3506 | Air Piping 2000-2030 | 3-27 | v |
| | 3708 | Spring Return Motorman's Valve | 1-28 | v |
| | 3923 | Copper Air Pipes-Standard Front Exit Cars | 3-29 | v |
| | 4249 | Copper Air Pipes-Standard Cars | 1-31 | v |
| | 4405 | Air Piping 1293-1328 | 11-31 | v |
| | 4514 | Air Piping 1129 Double End | 7-32 | v |
| | 4934 | Copper Air Pipes - 8 1/2" Cylinder | 12-34 | v |
| | 4936 | Copper Air Pipes with One Cylinder | 12-34 | v |
| | 5158 | Air Piping Rear End Control (not used) | 8-36 | v |
| | 5160 | Air Piping Rear End Control | 8-36 | v |

| | | | | |
|---|---|---|---|---|
| D | 1599 | Air Piping 1482-1581 | 12-11 | v |
| | 2520 | Air Piping MU Cars 2000-2003 | 1-17 | v |
| | 3540 | Air Piping 2000-2030 | 5-27 | v |

## 23 Series-Truck Brake Arrangements

| | | | | |
|---|---|---|---|---|
| D | 148 | #4 Baldwin Truck | 2-11 | v |
| | 165 | #2 Baldwin Truck | 2-11 | v |
| | 290 | Twin City Truck | 10-08 | v |
| | 1551 | #5-#6-#8 Trucks | 4-09 | v |
| | 2048 | #9 Truck | 1-14 | v |
| | 2372 | #2 Truck | 1-16 | v |
| | 2373 | #4 Truck | 1-16 | v |
| | 2817 | #12 Truck / Truck Assembly | 2-21 | v |

## 24 Series-Brake Arrangements

| | | | | |
|---|---|---|---|---|
| B | 576 | Brake Arrangements-Details 1145-63, 1255-59 | 5-09 | v |

| | | | | |
|---|---|---|---|---|
| C | 1669 | Brake Arrangements-Suburban Cars | 4-12 | v |
| | 2845 | Brake Arrangements-Trailer of 2 Car Train | 5-21 | v |
| | 4320 | Brake Arrangements 1293-1328 | 4-31 | v |
| | 4419 | Brake Equipment Location - One Man Cars | 12-31 | v |
| | 4518 | Brake Equipment Location - 1129 Double End | 8-32 | v |
| | 4591 | Brake Arrangements 1124-1128, 1131 | 11-32 | v |
| | 4909 | Air Brake Stress Diagram 1254, 1266-1328 | 10-34 | v |
| | 4910 | Air Brake Stress Diagram 1329-1554 | 11-34 | v |
| | 4911 | Air Brake Stress Diagram 1555-1854 | 10-34 | v |
| | 4950 | Brake Arrangements:cars with 200 type motors | 1-35 | v |

| | | | | |
|---|---|---|---|---|
| D | 575 | Brake Arrangements 1146-1163, 1255-1259 | 6-09 | v |
| | 676 | Brake Arrangements Class I-1 and J-2 Cars | 2-08 | v |
| | 694 | Brake Arrangements Cars 1164,1259,1266,1290 | 8-09 | v |
| | 1663 | Brake Arrangements Class I,J,K,L Cars | 4-12 | v |

## 25 Series-Hand Brakes and Rigging

| | | | | |
|---|---|---|---|---|
| B | 3411 | Hand Brake Assembly Stand-One Man Cars | 4-26 | v |
| C | 6114 | M. A. & C. R. R.R. 1-3 | 9-43 | v |

## 27 Series-Truck Assemblies

| | | | | |
|---|---|---|---|---|
| BLW | | Baldwin #123 | 2-04 | b |
| BLW | | Baldwin #167 GE 73C Motors | 4-05 | b |
| BLW | | Baldwin #188 | 12-05 | b |
| BLW | | Baldwin #338 GE 87 Motors | 5-07 | b |
| B | 260 | Equalizer-Baldwin #1 & #5 Trucks | 1-08 | v |
| | 1371 | Equalizer-Baldwin #2 Truck | 1-11 | v |
| | 1376 | Equalizer-Baldwin #4 Truck | 1-11 | v |
| C | 800 | Truck Assembly-Baldwin #1 | 1-05 | v |
| | 872 | Truck Assembly-Baldwin #1 | 11-04 | v |
| | 2011 | Equalizer-Twin City #6 & #8 Trucks | 11-13 | v |
| | 2049 | Equalizer-Twin City #9 Truck | 1-14 | v |
| | 3078 | Bolster-Baldwin #2 & #4 | 3-23 | v |
| | 3735 | Equalizer-Twin City #9RB | 3-28 | v |
| D | 192 | Truck Assembly-Twin City #7 (outside brakes) | 8-09 | v |
| | 801 | Truck Assembly-Baldwin #5 | 8-07 | v |
| | 1189 | Truck Assembly-Twin City #7 (inside brakes) | 10-10 | v |
| | 1378 | Truck Assembly-Baldwin #2 | 1-11 | v |
| | 1379 | Truck Assembly-Baldwin #4 | 1-11 | v |
| | 1550 | Truck Assembly-Twin City #6 & #8 | 3-09 | v |
| | 2047 | Truck Assembly-Twin City #9 | 1-14 | v |
| | 2536 | Truck Assembly-Twin City #11 | 3-17 | b |
| | 3116 | Truck Assembly-Twin City #12 | 7-23 | v |
| | 3116 | D12-100 Truck Assembly-Twin City #12RB | 5-24 | w |
| | 3728 | Truck Assembly-Twin City #9RB | 3-28 | v |

## 30 Series-Electrical Equipment

| | | | | |
|---|---|---|---|---|
| A | 110 | Resistance Hangers 707-731 | 4-08 | v |
| | 163 | Resistance Hangers 540-551 | 5-08 | v |
| | 4102 | Standard Controller Handle | 4-30 | v |
| B | 4750 | Safety Light Location-Snow Plows | 11-33 | v |
| C | 1 | Standard Location of Resistance Hangers | 4-09 | v |

## 31 Series-Controllers

| | | | | |
|---|---|---|---|---|
| A | 5629 | K-75 Controller Handle | 8-39 | v |
| C | 186 | Mechanical Reverse 1145-1195, 1255-1265 | 6-08 | v |

## 35 Series-Car Elevations

| | | | | |
|---|---|---|---|---|
| C | 2346 | M. A. & C. R. Ry. #1 | 9-15 | v |
| | 2642 | CLearance Diagram 1291-1854 | 12-17 | v |
| | 2676 | One Man Car-Motored Trailer | 1-19 | v |
| | 2677 | One Man Car-Motored Trailer | 1-19 | v |
| | 2687 | Motored Trailer for One Man Operation | 2-19 | v |
| | 2835 | Cars 2002-2003 | 3-21 | v |
| | 3779 | Proposed Arrangement-Front Vestibule Sash | 4-28 | v |
| | 4460 | 1129 Double End | 3-32 | v |
| | 4515 | 3 Double End | 7-32 | v |
| D | | Car Classification | | v |
| | 118 | Elevation-General Outline-Class L-8 Car | 4-08 | v |
| | 0000 | University of Minnesota Car | 8-14 | v |
| | 0000 | Proposed Motor Car-Minneapolis Water Dept. | | v |
| | 2969 | 45 Ft. Cars 2002-2003 | 5-22 | w |
| | 3204 | Cars 2004-2005 | 6-25 | v |
| E | 400 | Section & Elevation Class K-8-c Car | 1-09 | w |
| | 936 | Proposed High Speed MU Train Car | 10-09 | w |
| | 937 | Proposed High Speed MU Train Car | 10-09 | b |
| | 1350 | Section & Elevation Class L-8 Car | | w |
| | 2115 | Rail Welding Car Elevation | 2-14 | w |

## 36 Series-Car Details

| | | | | |
|---|---|---|---|---|
| A | 184 | Headlining Details-Class H,I,J,K-2 Cars | 6-08 | v |
| | 421 | Headlining for Cars 1360-1854 | 3-09 | v |
| | 3931 | Interior of 1746 Rear End | 3-29 | v |
| | 3984 | Proposed New Mirror Arrangement 2000-2030 | 8-29 | v |
| | 6178 | Transfer Letters-One Man Car | 3-44 | p |
| B | 2524 | Private Car Furniture Layout | | v |
| | 3386 | Window Guard Assembly 2004-2005 | 4-26 | v |
| | 3967 | Sash Stop for Cars 2006-2030 | 6-29 | v |
| | 4016 | Sand Hose Brace-Stillwater Locals 1-4 | 11-29 | v |
| | 4034 | Window Wiper Sash for 2000 Type Cars | 11-30 | v |
| | 4144 | Door Battens for Cars 900-1854 | 6-30 | v |
| | 4156 | Operator's Money Box-One Man Cars | 10-32 | v |
| | 4170 | Hang Rack-Motorman's Money Changer-One Man Cars | 8-30 | v |
| | 4242 | Foot Pedal/Fulcrum/Air Sander Valve 1336-1854 | 12-34 | v |
| | 4323 | Sand Box 1854 | 5-31 | v |
| | 4327 | Shelf for Door Switch 1599-1854 | 5-31 | v |
| | 4355 | Transfer Holder-One Man Cars 1493-1854 | 7-31 | v |
| | 4396 | Window Swipe Rubber | 10-31 | v |
| | 4417 | Seat Leg/Foot Rest Support Over Rheostat Heater | 12-31 | v |
| | 4475 | Sander Pipe Protector 1493-1853 | 4-32 | v |

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|---|---|---|---|---|
| | 4507 | Seat Wall Conditions-Double End Car 1129 | | v |
| | 4541 | RH Vestibule Window Inclined Sash 1336-1854 | 9-32 | v |
| | 4564 | Rear End Seating Plan 1116,17,19;1257,60-63 | | v |
| | 4596 | Corner Piece for Monitor Deck 1360-1854 | 1-33 | v |
| | 4624 | Blocks for Fender Sockets-One Man Cars 1336-1854 | 1-33 | v |
| | 4625 | Anchor Plate for Motorman's Stool 1336-1854 | 1-33 | v |
| | 4626 | Steel Frame Extension-Rear End-One Man Cars | 1-33 | v |
| | 4634 | Mud Guard for Compressor & Line Breaker | 2-33 | v |
| | 4640 | Mud Guard for Reservoirs | 3-33 | v |
| | 4645 | RH Vestibule Window Inclined Sash 1293-1328 | 3-33 | v |
| | 4647 | RH Vestibule Window Inclined Sash 2000-2030 | 3-33 | v |
| | 4648 | RH Vestibule Window Inclined Sash 1166-1253 | 3-33 | v |
| | 4652 | Cradle for Taillight Battery 1336-1854 | 3-33 | v |
| | 4676 | Rear Vestibule Mirror Location 1395 | 11-33 | v |
| | 4684 | Window Curtain Shield & Bracket 2000-2030 | 6-33 | v |
| | 4696 | Switch Shelf-One Man Cars | 7-33 | v |
| | 4804 | Bushing for Motorman's Seat | 2-34 | v |
| | 4813 | Mud Guard for CP27 Compressor | 3-34 | v |
| | 4905 | Money Changer Location-One Man Cars | 10-34 | v |
| | 4922 | Extra Storm Sash for Cars 1310-1854 | 11-34 | v |
| | 5232 | Longitudinal Section-Cab of 1352 | 11-32 | v |
| C | 403 | Wood Sections-Class K and L Cars | 2-09 | v |
| | 406 | Doors-Class K and L Cars | 2-09 | v |
| | 664 | Door Details-Class F Cars | 5-05 | v |
| | 665 | Section Details-Class H-6 Cars | 8-05 | v |
| | 682 | Carline-Class E, F Cars | 1-05 | v |
| | 683 | Carline-Class G cars | 10-05 | v |
| | 684 | Carline-Class H, I Cars | 5-06 | v |
| | 692 | Doors-CLass G, H, I Cars | 5-06 | v |
| | 867 | Thresholds and Slides 950-1107 | 12-09 | v |
| | 1494 | Diagram of Mastic Flooring-Standard Cars | 8-11 | v |
| | 1604 | Sheet Steel Fittings-Class L Cars | 1-12 | v |
| | 1614 | Ventilator-Standard Cars | 3-12 | v |
| | 1751 | Sill Sections-Standard | 8-12 | v |
| | 1812 | Thresholds & Slides 737-949 | 12-12 | v |
| | 1813 | " " 1221-1359 | 11-22 | v |
| | 1816 | " " 1112-1144 | 12-12 | v |
| | 1817 | " " 1360 and up | 10-09 | v |
| | 1846 | " " 1145-1220 | 1-13 | v |
| | 1918 | Front Bulkhead Sash Changes 950-1481 | 5-13 | v |
| | 1927 | Mail Box Holder-Standard | 5-08 | v |
| | 2270 | Cross Seat for Standard Cars | 2-15 | v |
| | 2319 | Window Latch Details-Standard Cars | 6-15 | v |
| | 2451 | Longitudinal Seat & Back-MU Car | 5-16 | v |
| | 2610 | Cab Door Latch | 7-17 | v |
| | 2657 | 800 Type Car with Front Exit (Seattle) | 6-18 | v |
| | 2839 | Headlining, Roofing, Sheathing 2002-2003 | 5-21 | v |
| | 2852 | Assembly of Cross Seat for 2002-2003 Train | 7-21 | v |
| | 2866 | Arrangement of Apparatus in 2002-2003 | 8-21 | v |
| | 3211 | Cross Seat Back | 6-25 | v |
| | 3212 | Cross Seat Cushion | 6-25 | v |

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|---|---|---|---|---|
|  | 3232 | Frame for Longitudinal Seat Cushion | 8-25 | v |
|  | 3271 | Seat Leg | 9-25 | p |
|  | 3365 | Sash & Fittings 2004-2030 | 3-25 | v |
|  | 3367 | Bumper Channel 2004-2005 | 3-26 | p |
|  | 3368 | Moulding & Light Diagram | 3-26 | v |
|  | 3373 | Layout of Operator's Automatic Folding Seat | 3-26 | v |
|  | 3378 | Step Brackets & Sill Guard 2004-2005 | 2-26 | v |
|  | 3385 | Window Guards 2004-2005 | 4-26 | v |
|  | 3398 | Seat Leg for Operator's Folding Seat | 4-26 | p |
|  | 3400 | Motorman's Mirror Extension | 3-25 | v |
|  | 3429 | Details of Operator's Folding Seat | 3-26 | v |
|  | 3463 | Ventilator-Standard | 11-26 | v |
|  | 3518 | Sun Shade-Front Vestibule-Stillwater Cars | 4-27 | v |
|  | 3559 | Cushion & Back for Operator's Seat | 4-40 | v |
|  | 3560 | Operator's Seat Assembly | 4-40 | v |
|  | 3599 | Seat Assembly 2006-2030 | 8-27 | v |
|  | 3609 | Window Guards 2000-2030 | 9-27 | v |
|  | 3615 | Reinforcing Plates 2006-2030 | 9-27 | v |
|  | 3631 | Fare Box Stands 2006-2030 | 10-27 | v |
|  | 3647 | Cabinet for Bell Box, Governor & Switch 2000-30 | 10-27 | v |
|  | 3676 | Box for Camel Back & Pickup 2006-2030 | 11-27 | v |
|  | 3701 | Bracket for Conductor's Transfer Box 2006-2030 | 1-28 | v |
|  | 3776 | Ventilator for S.E. Cars | 4-28 | v |
|  | 3794 | Conductor's Seat 2006-2030 | 5-28 | v |
|  | 3843 | Front Vestibule Equipment Cover 1254,1266-1328 | 8-28 | v |
|  | 3849 | Sizes of Sash and Glass 1360-1854 | 9-28 | v |
|  |  | Wall Bracing Plate |  | p |
|  | 3962 | Winter Bulkhead-Front Vestibule 2002-2030 | 6-29 | v |
|  | 3968 | Sash Lock, Lift & Spring 2006-2030 | 5-26 | v |
|  | 3985 | Bulkhead,Railing & Stanchion Castings 2000-2030 | 3-29 | v |
|  | 3989 | Mirror-Lightweight Cars | 9-29 | v |
|  | 3990 | Mirror Details-Lightweight Cars | 9-29 | v |
|  | 4032 | Bulkhead over LH Curtain 2000 type cars | 1-30 | v |
|  | 4046 | Location of Foot Controlled Devices 2000-2030 | 2-30 | v |
|  | 4047 | Location of Foot Controlled Devices Std FE Cars | 2-30 | v |
|  | 4064 | Front Bulkhead 2000 type Cars | 3-30 | v |
|  | 4066 | Seating Plan-Trailer Cars | 3-30 | v |
|  | 4071 | Front Bulkhead Curtain 2000 type Cars | 3-30 | v |
|  | 4073 | LH Front Bulkhead 2000 type Cars | 3-30 | v |
|  | 4074 | Floor Lining Reinforcing | 3-30 | v |
|  | 4098 | Car Moldings 800-1854, 2000-2030 | 4-30 | v |
|  | 4100 | Vestibule Window Flap 2000 type Cars | 4-30 | v |
|  | 4109 | Skirts for Cars 1254, 1266-1854 | 4-30 | v |
|  | 4148 | Standard Window Flaps 1482-1854 | 6-30 | v |
|  | 4281 | High Speed One Man Cars | 2-31 | v |
|  | 4616 | Skirts for One Man Cars | 1-33 | v |
|  | 7272 | Sliding Sash Detail 1166-1854 | 6-50 | v |
|  |  | Old Style Seating Arrangement-Fast Cars |  | p |
| D | 435 | Post Details-Class K,L | 3-09 | v |
|  | 436 | Bulkhead Details-Class K2 | 3-09 | v |
|  | 659 | Bulkhead Details-Class K8 | 7-09 | v |

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|---|---|---|---|---|
| | 873 | Sections-Class F | 6-05 | v |
| | 874 | Sections-Class F | 3-05 | v |
| | 2330 | Standard Mail Box | 8-15 | v |
| | 2478 | Doors for 2000-2001 | 8-16 | v |
| | 2498 | Platform Layout 2000-2001 | 10-16 | v |
| | 2512 | Platform Details 2000-2001 | 12-16 | v |
| | 2814 | Rebuild Rear Platform 1600-1625 | 2-21 | v |
| | 3230 | Front Platform 2004-2005 | 7-25 | v |
| | 3233 | Assembly of Longitudinal & Cross Seats | 8-25 | v |
| | 3235 | Section 2004-2005 | 8-25 | v |
| | 3315 | Conductor's Stand Assembly (LW 167) | 2-25 | v |
| | 3316 | Conductor's Stand (LW 165) | 2-25 | v |
| | 3335 | Longitudinal Section 2004-2005 | 2-26 | v |
| | 3361 | Elevation & Molding Details 2000 type Cars | 3-26 | v |
| | 3371 | Mounting Board 2004-2005 | 3-26 | v |
| | 3451 | Plan & Elevation 45'6" x 9'0" Car (2000-2030) | 10-26 | w |
| | 3500 | Platform Equipment 2000-2030 | 3-27 | v |
| | 3552 | Longitudinal Section 2006-2030 | 6-27 | v |
| | 4300 | Experimental One Man Car-Remodeled 1290 Type | 4-31 | w |
| | 4314 | Front End Layout-Standard Front Exit Cars | 4-31 | w |
| | 4321 | Elevation-Front & Rear Bulkhead 1293-1328 | 4-31 | v |

## 37 Series-Underframe Details

| | | | | |
|---|---|---|---|---|
| C | 3548 | Underframe Nailing Strips 2006-2030 | 6-27 | v |
| | 6619 | Cab for #50 Crane Car | 12-47 | p |
| D | 856 | Reinforcing Frame Class B, C, D7 | 7-03 | v |
| | 857 | Reinforcing Frame 1038-1079 | 3-04 | v |
| | 858 | Reinforcing Frame 1080-1090 | 1-05 | v |
| | 859 | Reinforcing Frame 1091-1107 | 1-05 | v |
| | 3245 | Car Body Bolster 2004-2005, Gr.Rap.,Dul.& Still. | 6-24 | v |
| | 3274 | Connection Details-End of Underframe 2006-30 | 10-25 | v |
| | 3328 | Details-Underframe Cross Sills 2006-2030 | 1-26 | v |
| | 3329 | Details-Steel Members, Equip. Support 2006-30 | 1-26 | v |
| | 3379 | Car Body Bolster | 3-26 | p |
| | 3455 | Car Body Bolster 2006-2030 | 11-26 | v |
| | 3473 | Side Plate Details 2006-2030 | 1-27 | v |
| | 3474 | Longitudinal Center Sills | 1-27 | v |
| | 3479 | Rafters & Carlines | 2-27 | v |
| | 3484 | Platform Knees | 2-27 | v |
| E | 850 | Underframe Class K Car | 8-09 | w |

## 38 Series-Attachments

| | | | | |
|---|---|---|---|---|
| C | 475 | Sand Box Details | 4-09 | v |
| | 476 | Sand Box Details | 4-09 | v |
| | 477 | Standard Sander Box | 4-09 | v |
| | 553 | Trolley Guard & Roof Handle | 5-09 | v |

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|---|---|---|---|---|
| | 559 | Transom Opener | 5-09 | v |
| | 565 | Standard Bell Cord Hanger Details | 5-09 | v |
| | 621 | Window Screen Frames 1200-1300 Cars | 6-09 | v |
| | 953 | Standard Motorman's Stool | 11-09 | v |
| | 1168 | Globe Ventilator-Duluth Incline | 8-10 | v |
| | 1393 | Fare Box-Front Exit Cars | 3-11 | v |
| D | 404 | Door Operating Rig Class K2 | 2-09 | v |
| | 1342 | Gate Staff & Fare Box Supports-Front Exit Car | 4-11 | v |

## 39 Series-Work Car Elevations & Underframes

| | | | | |
|---|---|---|---|---|
| A | 3690 | Snow Plow Clearances | 12-27 | v |
| B | 3434 | Extension Wing for Snow Plows | | v |
| | 5388 | Track Grinder 1261 | 1-38 | v |
| C | 3176 | Proposed Rail Grinder | 11-24 | v |
| | 3702 | Proposed Shifter Car | 12-27 | v |
| | 4216 | General Plan-Single Shear Snow Plow | 10-30 | v |
| | 4493 | Equipment Location-Sand Cars 43-45 | 6-32 | v |
| | 6016 | Shifter Car | 2-43 | v |
| D | 127 | General Plan - Wire Car Underframe | 3-05 | v |
| | 829 | Elevation-Wrecker 21 | 3-07 | v |
| | 830 | Snow Plow-Steel Underframe | 1-06 | v |
| | 831 | Front Wing & Frame-Snow Plow | 1-06 | v |
| | 832 | Elevation-Single Shear Snow Plow | 11-05 | v |
| | 916 | Elevation-Double Shear Snow Plow | 9-09 | v |
| | 929 | Double Shear Plow Detail | 10-09 | v |
| | 2631 | Elevation-Combination Snow Plow (St.P Sou. Ry.) | 9-17 | v |
| | 3426 | Changes to Snow Plows | 8-26 | v |
| | 3900 | Ice Remover-Snow Plow 82 | 1-29 | v |
| | 3924 | Proposed Track Snow Cleaner | 3-29 | v |
| E | 1192 | Sand Car (43-45) | 11-10 | w |
| | 2381 | Standard Work Car (Steel) | 1-16 | w |
| | 2608 | Elevation of Snow Plow (Single Shear) | 9-12 | w |

## 42 Series-Drawbars & Couplers

| | | | | |
|---|---|---|---|---|
| B | 1332 | Drawbar-Sand Car | 12-10 | v |
| C | 3079 | Standard Tube Coupler | 3-23 | v |

## 45 Series-Fenders,Pilots,Scrapers

| | | | | |
|---|---|---|---|---|
| C | 599 | Standard Pilot | 9-06 | v |
| | 3829 | Snow Scraper 1254, 1266-1328 | 8-28 | v |

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|---|---|---|---|---|
| D | 838 | Nose Plow-Suburban Car | 12-06 | v |

## 48 Series-Gates, Doors, Steps

| | | | | |
|---|---|---|---|---|
| A | | Front Steps 1286 | 5-46 | p |
| | 5865 | Lettering-Rear Door Opener | 10-41 | p |
| B | 447 | Gates for #2 & #8 Steps | 2-08 | v |
| | 5601 | Door Engine Arrangements | 5-39 | v |
| | 6390 | Lamp Socket Support-Door Signals | 12-45 | p |
| | 6467 | Lower Door Pivot-One Man Cars | 8-46 | p |
| | 6617 | Door Guide Details-PCC Cars | 12-47 | p |
| | 7112 | Door Operating Scheme-Standard Cars | 11-48 | p |
| | 7328 | Door Engine Covers | 11-50 | p |
| C | 287 | Gate Arrangement #1 & #6 Steps | 11-08 | v |
| | 291 | Gates for #6 Steps | 11-08 | v |
| | 630 | Details-#3 Steps & Gates | 4-08 | v |
| | 631 | Details-#4 Double Gate Step | 1-04 | v |
| | 641 | Details-#5 Double Gate Step | 6-03 | v |
| | 651 | Details-#2 & #8 Steps | 2-08 | v |
| | 861 | Gates for #4, #5, #7 Steps | 9-09 | v |
| | 2335 | Gate Levers 737-1309 | 8-15 | v |
| | 3124 | Door Layout 2003-2003 | 8-23 | v |
| D | 2357 | Step Rods #4, #5, #7 Steps | 10-15 | v |
| | 2358 | Step Rods #1 & #6 Steps | 10-15 | v |
| | 2739 | Operation of Gates by Conductor | 3-20 | v |
| | 3764 | Front Exit Doors | 5-28 | v |
| | 4424 | Door Operating Mechanism Layout-One Man Cars | 1-32 | v |

## 50 Series-Tail Lights & Classification Lights

| | | | | |
|---|---|---|---|---|
| B | 5242 | Reflecting Tail Light | 12-36 | v |
| C | 191 | Electric Tail Lamp | 7-08 | v |
| | 494 | Electric Classification Lamp | 4-09 | v |
| | 970 | Door for Case-Luminous Arc Headlight | 12-09 | v |

## 55 Series-Heating Systems

| | | | | |
|---|---|---|---|---|
| B | 2940 | Proposed Electric Heating System-Std. FE Cars | 2-22 | p |
| | 3148 | Heating Plan 2002 | 1-24 | v |
| | 3930 | Front Vestibule Window Heaters | 4-29 | v |
| | 6472 | Oil Burner for Car Heaters 1436-1756 | 10-46 | p |
| | 6477 | Location of New Oil Heater 1756 | 10-46 | p |
| | 6481 | Oil Heater Location | 11-46 | p |
| | 6656 | Heater Guards-Rear Vestibule Heaters | 3-48 | p |

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|---|---|---|---|---|
| C | 2212 | Fixtures-Standard Heater | 10-14 | v |
| | 2795 | Coal Bin for Hot Air Heater | 10-20 | v |
| | 3095 | Rheostat Heater Control Arrangement | 5-23 | v |
| | 3927 | Heater Locations-Trailers 200-225 | 4-29 | v |
| | 3972 | Left Hand Front Bulkhead-Standard Cars | 7-29 | v |
| | 4957 | Defrosting Heaters-Cars 1-4 | 1-35 | v |
| | 5731 | Fire Pot for Hot Air Heater | 6-40 | v |
| | 7284 | Smoke Jack Details & Assembly | 8-50 | v |
| D | 3762 | Plan & ELevation-FE Cars 1254, 1266-1328 | 4-28 | v |
| | 3798 | Heating System Plan-Suburban Cars | 5-28 | v |
| | 4402 | Rheostat Heater-One Man Car 1327 | 11-31 | v |
| | 4474 | Electric Heaters 1493-1854 | 4-32 | v |

## 60 Series-Motors

| | | | | |
|---|---|---|---|---|
| B | 5509 | Bearing Gauges GE 213-216 Motors | 9-38 | p |
| | 7306 | Field Coil Flange GE 213 Motor | 8-50 | p |
| C | 1492 | Diagram GE 200 Motor | 1-14 | v |

## 62 Series-Motor Details

| | | | | |
|---|---|---|---|---|
| B | 5505 | Commutator for GE 213 Motor | 8-38 | v |
| | 5513 | GE 200H Commutator | 2-40 | v |
| | 5535 | GE 258 Commutator | 2-40 | v |
| | 5619 | GE 203Q Commutator | 2-40 | v |
| | 5701 | Inner & Outer Mica Cones GE 203L | 2-40 | v |
| | 5703 | Inner & Outer Mica Cones GE 213A | 2-40 | v |
| | 5723 | Brush Holder Supporter GE 213 | 6-40 | v |
| | 5808 | GE 216 Armature Head, Commutator End | 4-41 | v |
| | 6017 | Steel Shield for End of GE 258 Motor | 2-43 | v |
| | 6247 | Commutator for Mill Motor | 9-44 | p |
| | 6352 | GE 216 Armature Head, Commutator End | 5-45 | p |
| | 7176 | GE 200 Armature Head, Commutator End | 3-49 | p |

## 70 Series-Fare Boxes, Registers & Stands

| | | | | |
|---|---|---|---|---|
| A | 4739 | Handle for Signal Bell Cord | 10-33 | v |
| B | 3875 | Fare Box Stand (Front) 2006-2030 | 10-28 | v |
| | 4356 | Fare Box Stand Assembly 1293-1328 | 7-31 | v |
| | 4432 | Rear Fare Box Stand Assembly | 1-31 | v |
| | 7093 | Fare Box Rack-Fare Box Truck | 9-48 | |
| | 7114 | Fare Box Carry-Fare Box Truck | 11-49 | |
| | 7337 | Coin Sacking Trays | 1-51 | |
| C | 1188 | International R-6 Register | 10-10 | v |

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|---|---|---|---|---|
| | 2658 | PAYE Register Stand | 7-18 | v |
| | 2683 | Stand & Fittings | 2-19 | v |
| | 2683 | Fare Box Stand, PAYE Cars | 8-21 | v |
| | 3640 | Proposed Arrangement-2 Fare Boxes-Interurban | 10-27 | v |

## 74 Series

| | | | | |
|---|---|---|---|---|
| C | 4036 | Blackboard & Tripod for Operating Dept. | 1-30 | v |
| | 4219 | Demonstration Star for Safety Conferences | 10-30 | v |

## 75 Series-Destination Signs

| | | | | |
|---|---|---|---|---|
| A | 5630 | Car Stop Sign | 8-39 | v |
| | 6400 | Safety Step Sign | 12-45 | p |
| | 6430 | Portable Sign for Stations | 4-46 | p |
| | 6430 | "   "   "   " | 4-48 | p |
| | 7002 | "   "   "   " | 4-48 | p |
| | 7003 | "   "   "   " | 4-48 | p |
| | 7072 | Track Switch Sign | 8-48 | p |
| | | | | |
| B | | No Smoking Sign | 1-38 | v |
| | 4372 | Letter Plates 1293-1328 | 1-32 | v |
| | 4439 | Proposed 2 Roll Sign 2000 series cars | 2-32 | v |
| | | | | |
| C | 561 | Sign Frame Class K-2 Cars | 3-09 | v |
| | 763 | Sign Frame Class L-8 Cars | 8-09 | v |
| | 2663 | Skip Stop Sign | 9-18 | v |
| | 2691 | Signs-PAYE Cars | 4-19 | v |
| | 3126 | Sign for Front End 2002-2003 | 8-23 | v |
| | 3632 | Sign Box-Front Vestibule 2006-2030 | 10-27 | v |
| | 3949 | Front Bulkhead Sign Location | 5-29 | v |
| | 3953 | Front Bulkhead Sign Locations | 5-29 | v |
| | 4158 | Sign & Lettering Details-Numerical Sign | 7-30 | v |
| | 4174 | Signs-One Man Cars | 8-30 | v |
| | 4218 | Entrance & Exit Sign-Front Exit Cars | 10-30 | v |
| | 4303 | Illuminated Destination Sign-Front Exit Cars | 4-31 | v |
| | 4313 | Removable Sign-One Man Cars | 4-31 | v |
| | 4330 | Post Sign-One Man Car | 5-31 | v |
| | 4338 | Destination Sign-All Cars | 5-31 | v |
| | 5880 | Decal-Front Bulkhead | 1-42 | v |
| | 6442 | Sunshade Safety Sign | 8-46 | v |

## 76 Series-Springs

| | | | | |
|---|---|---|---|---|
| B | 5252 | Rubber Springs-Twin City #9 Truck | 1-37 | v |

## 78 Series-Trolley Bus

|  |  |  |  |
|---|---|---|---|
| C 2933 | Proposed Trolley Bus | 1-22 | v |
| 3033 | Steering Column & Controller | 10-22 | v |
| 3040 | Forging Details | 10-22 | v |
| 3045 | Rail Contactor | 10-22 | v |
| 5610 | Trouble Truck Body | 5-39 | v |
|  |  |  |  |
| D 3001 | Chassis | 8-22 | v |
| 3019 | Drive Assembly | 9-22 | v |
| 3037 | Rear Sprign | 10-22 | p |
| 3044 | Details-Steering Gear Parts | 10-22 | v |
| 3046 | Details-Brake Parts | 11-22 | v |
| 3047 | Heater | 11-22 | v |
| 3064 | Current Collector | 2-23 | v |
|  |  |  |  |
| E 3021 | Elevation of Trolley Bus | 9-22 | v |
|  |  |  |  |
| 90C4227 | S-158-B Controller Wiring | 11-30 | v |

## 79 Series

|  |  |  |  |
|---|---|---|---|
| C 5552 | Transmission Stand for Bus Garage | 1-39 | v |

## 85 Series-Trolley Bases

|  |  |  |  |
|---|---|---|---|
| B 1745 | Trolley Assembly | 8-12 | v |
| 2023 | Trolley Pole Sound Deadener | 12-29 | v |
| 3942 | Trolley Base Noise Deadener | 5-29 | v |
| 5648 | Suggestion Development-Trolley Rope Protection | 10-39 | v |
| 5769 | Temporary Repair Device for Trolley Base Spring | 11-40 | v |
| 6358 | Trolley Catcher Support-Standard Cars | 7-45 | p |
|  |  |  |  |
| C 413 | U.S. 13RB Trolley Base | 2-09 | v |
| 1074 | Details-GE U.S. 13 Trolley Base | 3-10 | v |
| 1363 | 4" Wheel and Harp | 1-11 | v |
| 3819 | Harp for 7" Wheel | 7-28 | v |
| 3963 | 7" Wheel and Harp | 6-29 | v |
| 4389 | Sleet Cutter | 10-31 | v |

## 86 Series

|  |  |  |  |
|---|---|---|---|
| B 2885 | Conductor and Motorman Switch Rod | 10-21 | v |
| 3693 | Switch Rod 2000-2030 | 12-27 | v |
| 4367 | Switch Rod One Man Cars | 2-32 | v |
| 5494 | Clamp for Wheel Hone | 8-38 | v |
| 5547 | Flange Grinder Assembly | 12-38 | v |
| 5548 | Details-Flange Grinder | 12-38 | v |
| 5549 | Details-Flange Grinder | 12-38 | v |
| 6315 | Switch Rod Holder PCC Cars | 3-45 | p |
| 6543 | Drive Pins for Broken Axles | 3-47 | p |

| | | | | |
|---|---|---|---|---|
| | 7034 | Draw Bar for Shifter | 1-48 | p |
| | 7045 | Truck Spring Extending Device for Stations | 6-48 | p |
| | 7088 | Track Flare Pots | 9-48 | p |
| | 7104 | Door Post Loosening Device-PCC Cars | 10-48 | p |
| | 7113 | Wrench for Trouble Truck for Axle Drive Pins | 11-48 | p |
| D | 4506 | Front Platform-Jackson St. Cars 1124-1128, 1131 | 6-32 | v |

## 90 Series-Wiring Diagrams

| | | | | |
|---|---|---|---|---|
| B | 3546 | K-75 Controller | 5-27 | v |
| | 5992 | GE Welder-Motor Generator Winding | 11-42 | v |
| | 6032 | Wiring Diagram-Shifter Car | 4-43 | v |
| | 6112 | MA&CR Ry. K-43 & K-37 Double End Operation | 9-43 | v |
| | 6113 | MA&CR Ry. Light Wiring | 9-43 | v |
| | 6384 | Special K-37 Controller-Steam Sta. Loco. #20 | 11-45 | p |
| C | 2 | Rewiring Diagram 992-1066 | 4-09 | v |
| | 3 | " " 817-867,906-917,950-991 | 4-09 | v |
| | 4 | " " 752-765, 797-816 | 4-09 | v |
| | 5 | " " 868-899 | 4-09 | v |
| | 6 | " " 608-626 | 4-09 | v |
| | 7 | " " 737-751,766-772,786-788 | 4-09 | v |
| | 8 | " " 900-905, 918-949 | 4-09 | v |
| | 9 | " " 1043, 1067-1107 | 4-09 | v |
| | 189 | Lighting Circuits 1310-1384 | 7-08 | v |
| | 794 | Wiring Diagram GE 73/C-6 Class H-6 | 7-09 | v |
| | 1051 | K-37 Controller and GE 216 Motors | 3-10 | v |
| | 1067 | Wiring Diagram-Sprague GE Type M Control | 3-10 | v |
| | 1633 | K-37-C and K-43 Equipment | 2-12 | v |
| | 3546 | Wiring Diagram 2000-2030 | 5-27 | v |
| | 3850 | Light Locations 2000-2030 | 9-28 | v |
| | 4228 | Push Button Layout-Trailer Cars | 10-30 | v |
| | 4252 | Light Location & Wiring 900-1144, 1164-1253 | 1-31 | v |
| | 4289 | Light Location & Wiring Suburban Cars | 3-31 | v |
| | 4404 | Door Control & Safety Features-One Man Cars | 11-31 | v |
| | 4444 | K-37 & K-43 Controllers With Field Shunts | 2-32 | v |
| | 4454 | Lights, Doors, Bells Wiring | 3-32 | v |
| | 4511 | Wiring Diagram-Jackson St. Cars 1124-1128,1131 | 7-32 | v |
| | 4516 | " " 3-4 Double End | 7-32 | v |
| | 4666 | " " 1-2 | 4-33 | v |
| | 4754 | " " Snow Plows | 11-33 | v |
| | 5344 | Lighting Diagram-One Man Cars | 10-37 | v |
| | 5682 | Heater Wiring Diagram-Special Cars | 1-40 | v |
| | 5683 | " " " -Standard Cars | 1-40 | v |

## 95 Series-Wheels

| | | | | |
|---|---|---|---|---|
| B | 3151 | Standard Wheel Gauge | 3-24 | v |
| | 5785 | Sound Deadener-Standard Car Wheels | 12-40 | v |

|  |  |  |  |
|---|---|---|---|
| 6622 | Wheel for #74 Yard Crane | 12-47 | p |

## 96 Series-Rails

|  |  |  |  |
|---|---|---|---|
| B 4897 | Typical Worn Rails | 9-34 | v |
| 7056 | Wheel Gauge | 6-48 | p |
| 7363 | Connecting Rod for Lorain Track Switch | 5-51 | p |

## 99 Series-Miscellaneous

|  |  |  |  |
|---|---|---|---|
| A | TCL Equalizer Bars-#6 Truck | 2-41 | p |
|  | Mirror Measurements-2000 | 4-41 | p |
|  | Bus/Streetcar Clearance | 3-45 | p |
|  | TCL Scrapers on GE B-B 90 Ton Diesel Locomotive |  | p |
|  | Form for Tests 1932: Minneapolis-St. Paul line | ?-32 | v |
| 4879 | Clearance Diagram 1645-1854 | 7-34 | v |
| 4981 | Centers of Gravity Diagram |  | v |
| 5032 | Farebox Diagram |  | v |
| 5230 | Location of Thermometers-Test Car 1352 | 11-36 | v |
| B 4190 | Clearances-Standard Cars | 9-30 | v |
| 4845 | Loading Incline | 4-34 | v |
| 5139 | WH Welder on Truck #99 | 7-36 | v |
| 5348 | Curve Traffic Sign | 10-37 | v |
| 5741 | Mail Sack | 8-40 | v |
| 6281 | Ash Receptacle at Ends of Lines | 12-44 | p |
| C 974 | Floor Plan-Car 1369 | 1-10 | v |
| 1513 | Standing Area of Cars | 10-11 | v |
| 1690 | Floor Plan 868-899 | 5-11 | v |
| 1691 | Standing Area Diagram | 5-12 | v |
| D 4294 | Location of Company Buildings & Structures | 3-31 | v |

## D12 Series-Lightweight Noiseless Truck

|  |  |  |  |
|---|---|---|---|
| B12-143 | Clamp CB Plate-#12 Truck | 1-27 | v |
| -144 | Rubber Cushion for CB-#12 Truck | 1-27 | v |
| -149 | CB for Bolster-#12 Truck | 3-24 | v |
| -172 | Elliptic Spring-#12 Truck | 4-24 | v |
| -173 | " " -#12 Truck | 4-24 | v |
| -299 | Axle Unit Assembly-#12 Truck | 9-26 | v |
| -300 | " " " -#12 Truck | 11-26 | v |
| C12-306 | 26" Wheel-#12 Truck | 11-26 | v |
| D12-100 | #12D Truck | 5-24 | v |
| -101 | #12 Truck Assembly | 12-26 | v |
| -208 | RB & Gear Assembly-#12 Truck | 2-24 | v |

| | | | |
|---|---|---|---|
| -414 | #12G Truck | 2-30 | v |

## Lightweight Noiseless Electric Street Car Co.

| | | | |
|---|---|---|---|
| 115 | Double End One/Two Man Electric Rail Coach | 11-24 | v |
| 220 | Pittsburgh type Peter Witt Car | 3-25 | p |
| 275 | Car Types (Chattanooga,Nashville,Evansville) | ?-26 | w |

## General Electric Co.

6742912 PCC Car Wiring (in possession of George K. Isaacs)

## Unclassified

| | | | |
|---|---|---|---|
| 14C4497 | Track Welder's Stool | 6-32 | v |
| 18C4042 | Booths-Wildwood Cafe | 2-30 | v |
| 4290 | Enclosed Waiting Station | 3-31 | v |
| 4420 | Smoke Detector-Station Heating Plants | 12-31 | v |
| 4579 | Door Opening in Rolling Doors | 11-32 | v |
| 4663 | Stage Suspension Beams for Painters | 4-33 | v |
| 77B6277 | Coke Box for Filtering Oil from Condensate | 11-44 | v |
| 78C4262 | Trailer Truck for Rail Grinder | 1-31 | v |

American Trolley Wheel Co., St. Paul: Trolley Wheel b

## Structures

| | | |
|---|---|---|
| Hopkins Viaducts | 1905-06 | b |
| Selby Tunnel | 1906 | b |

## Buildings

### 11 Series-Minneapolis Office & Substation

| | | | |
|---|---|---|---|
| | First Floor Plan | 7-23 | b |
| | Second Floor Plan | 7-23 | b |
| | Third Floor Plan | 7-23 | b |
| American Bridge Co.-Details of Columns | | 5-03 | b |
| 1001E | Office Alterations-3rd Floor | 12-06 | b |
| 1002E | Substation Details | ??-03 | b |
| 1003E | Substation-Location of Wire Tubes | ??-03 | b |
| 1004E | Office-Detail for Steps | ??-03 | b |
| 1007E | Basement Plan-Ventilation & Plumbing | 3-03 | b |
| 1011E | Side Elevation | 3-03 | b |
| 1012E | Rear Elevation | 3-03 | b |

|  |  |  |  |
|---|---|---|---|
| 1013E | Footing Plan | 2-03 | b |
| 1018E | Roof Plan | 3-03 | b |
| 1019E | 1st Floor Steel Plan | 3-03 | b |
| 1020E | 2nd Floor Steel Plan | 3-03 | b |
| 1021E | 3rd Floor Steel Plan | 3-03 | b |
| 1022E | Roof Steel Plan | 3-03 | b |
| 1023E | Details-Window Frame,Glass Partition |  | b |
| 1024E | Detail-Inside Finish | 3-03 | b |
| 1025E | Exterior Details | 2-03 | b |
|  | Alterations as Planned, Changed |  | b |
| 1027B | Arrangement of Basement | 5-12 | b |
| 1027B | Arrangement of Basement | 5-12 | b |
| 1119A | Substation-Conduit for Transmission Cable | 5-12 | b |

|  |  |  |  |
|---|---|---|---|
| 18C4856 | Sash Lock-11th & Hennepin | 12-32 | v |
| 4731 | Rack for Print Cards-Print Shop | 10-33 | v |
| 4838 | Rotary Room Measurements | 4-34 | v |
| 18D3513 | 4th Floor Plan | 4-27 | b |

## 15 Series-St. Paul Office & Substation

|  |  |  |  |
|---|---|---|---|
| 79E | Elevation-Alley Side | 6-03 | b |
| 81E | 1st Floor Plan | 6-03 | b |
| 82E | 2nd Floor Plan | 6-03 | b |
| 82E | 2nd Floor Plan | 6-03 | b |
| 84E | Section | 6-03 | b |
| 87E | Basement Plan | 6-03 | b |
| 91E | Detail-Inside Cornices | 3-03 | b |
| 92E | Floor Framing & Details-Booster |  | b |

|  |  |  |  |
|---|---|---|---|
| 18B4226 | TCL Fire Prevention | 11-30 | v |

## 17 Series-Snelling Bus Shop

|  |  |  |  |
|---|---|---|---|
| B 5798 | Reconstructing Exhaust Fan | 3-42 | v |
| 5943 | Welding Table | 6-42 | v |
| 5981 | Transmission Shaft Press | 9-42 | v |
| 5984 | Cleaner Room Hood | 10-42 | v |
| 5985 | Temporary Door for Spray Booth | 10-42 | v |
| 6108 | Doors for Steam Room | 9-43 | v |
| 6370 | Tire Holding Stand | 8-45 | v |
| 6454 | Engine Cooling System | 7-46 | v |
| 6463 | Belt Tightener for Circulating Pump | 8-46 | v |
|  | Bus Wheel Dolly |  | v |

# 18 Series-Car Stations and Shops

## Snelling Station

| | | | | |
|---|---|---|---|---|
| | | Snelling Ave. Car Station | 4-05 | v |
| | | Heating Plans for Powerhouse | | v |
| | | Power House-Longitudinal Section | 5-05 | v |
| | | Power House-Plan | 5-05 | v |
| | | Power House-Elevation | 5-05 | v |
| | | Vestibule in Snelling Station | | v |
| C | 386 | Refuse Car Pit | 1-09 | v |
| | 4132 | Tunnel Section-Boiler Room to Station | 5-30 | v |
| | 4272 | Glass Case for Baseball Trophy | 1-31 | v |
| | 4601 | Steel Roof over Cashier | 12-32 | v |
| | 4730 | Small Door for Rotary Room | 10-33 | v |
| | 4780 | Trolley Run at Crane | 1-3? | v |
| | 5462 | Pit Light Layout | 5-3? | v |

## Snelling Shops

| | | | | |
|---|---|---|---|---|
| | 339 | Plan of Blacksmith Shop | | v |
| | 342 | Plan of Truck Shop | | v |
| C | 3961 | Car Storage Building Location | 6-29 | v |
| | 4013 | Trolley Trough-Steel Shop | 11-29 | v |
| | 4232 | Gasolene Dispensing Layout-Oil House | 12-30 | v |
| | 4457 | Drainage Traps-Erecting Shop | 3-32 | v |
| | 4664 | Manhole Details-Scale House | 4-33 | v |
| | 4669 | Housing Addition for Rail Bender | 4-33 | v |
| | 4672 | Toilet Partitions-Dining Room | 5-33 | v |
| | 4761 | Hood over Babbit Pots | 11-33 | v |
| D | 1430 | Forge & Structural Shop | 5-12 | v |

## Snelling Shops Boiler Room

| | | | | |
|---|---|---|---|---|
| B | 5968 | Dust Spout Doors-Shop Boilers | 9-42 | v |
| | 5979 | Catwalk over Boilers | 10-42 | v |
| | 5980 | Paddle Switch for Coal Conveyors | 10-42 | v |
| | 6236 | New Compressor Location-Pump Room | 8-44 | v |
| | 7205 | Outside Coal Bins-New Boiler | 8-49 | v |
| | 7206 | Coal Control Gates-New Boiler | 8-49 | v |
| | 7210 | New Boiler Supports | 8-49 | v |
| | 7241 | Steam Mains for W.T. Boiler | 11-49 | v |
| | 7243 | Fan Room-W.T. Boiler | 12-49 | v |
| | 7311 | Repairs to Wall Under Outside Coal Bins | 9-50 | v |
| C | 4015 | Cold Air Drain Off Pipe-Compressor Room | 11-29 | v |
| | 4735 | 6" Cylinder-Coal Spout-Boiler Room | 10-33 | v |

| | | | |
|---|---|---|---|
| 4736 | 10" Cylinder for Coal Hopper | 10-33 | v |
| 4737 | Coal Spout-Boiler Room | 10-33 | v |
| 4738 | Cylinder Support-Boiler Room Coal Hopper | 10-33 | v |
| 4740 | Small Hopper Agitator-Boiler Room | 10-33 | v |
| 7301 | Dust Collector-W.T. Boiler | 8-50 | v |

| | | | |
|---|---|---|---|
| D 7196 | Layout-W.T. Boiler | 7-49 | v |
| 7315 | Coal Conveyors-New Boiler | 10-50 | v |

| | | | |
|---|---|---|---|
| 19B3129 | Layout-Coal Handling Crane-Boiler Room | 8-23 | v |
| 19C3094 | Coal Handling Crane | 6-23 | v |
| 323? | Extension to Coal Hopper-Power House | 8-25 | p |
| 4490 | Scaffold Details 100,000 Gallon Tank | 5-32 | v |
| 4912 | Ash Bin Reconstruction | 11-34 | v |
| 19D3097 | Boiler Room-Cyclone Spouting | 6-23 | v |
| 3098 | Boiler Room-Details-Coal Bunker, Spouts, Etc. | 6-23 | v |

## East Side Station

| | | | |
|---|---|---|---|
| C 4495 | Stoker Layout | 6-32 | v |
| 4600 | Steel Roof Over Cashier | 12-32 | v |
| 4772 | Damper for 3 Ventilators in #1 Barn | 12-33 | v |
| 4942 | Exhaust Ventilator | 1-3? | v |

## Nicollet Station

| | | | |
|---|---|---|---|
| C 4602 | Industrial Commission | 12-32 | v |
| 4899 | Garage Heat Room | 9-34 | v |

## Lake Street Station

| | | | |
|---|---|---|---|
| C 1118 | Boiler Setting | 6-10 | v |
| 4771 | Door Brace-Rolling Doors | 12-33 | v |

| | | | |
|---|---|---|---|
| D 1101 | Section | 4-10 | v |
| 1290 | General Layout | 2-10 | v |

## North Side Station

| | | | |
|---|---|---|---|
| C 4637 | Chemical Wagon Housing | 2-33 | v |
| 4727 | Sand Drier Castings | 9-33 | v |

## South St. Paul Station

| | | | |
|---|---|---|---|
| D 2704 | Elevations | 8-19 | b |

## Power Stations/Substations

| | | | |
|---|---|---|---|
| 25029-1 | Location of Instrument Transformers-Water Power Station | 3-05 | b |
| 506-70B | Manhole Frame & Cover | 2-11 | b |
| | Rear Header Section for B & W Boiler | | p |
| C | Minnehaha Trainmen's Toilet | 7-14 | b |
| 4012 | Storeroom Partitions-University Substation | 11-29 | v |
| 4126 | Minnehaha Substation Plat | 5-30 | v |
| 4639 | Floor Supports Under Booster-Hope St. Substation | 3-33 | v |
| 4698 | Repair Parts for Generator-Lake St. Substation | 7-33 | v |
| 4853 | Partition-University Substation | 5-3? | v |
| 4854 | Roofing Details-Steam Station | 6-3? | v |
| 4855 | Skylight Vent-Steam Station | 6-4? | v |

## DULUTH ST. RY.

| | | |
|---|---|---|
| 1748 | Seating and Floor Plan One-Man Cars | 3-28 |
| 1783 | Air Piping One-Man Cars | 12-28 |
| 1814 | Floor Plan & Side Elevation One-Man Cars | 5-29 |

Note: the foregoing three drawings are photographic negatives in reduced size from the originals.

# KEY TO ABBREVIATIONS

## PHOTOGRAPHIC NEGATIVE COLLECTION

| | |
|---|---|
| A | 3/4 angle view |
| F | Front |
| R | Rear |
| GS | "Gate" Side |
| PS | "Pole" Sice |
| FP | Front Platform |
| RP | Rear Platform |
| IF | Interior Front |
| IR | Interior Rear |
| CSL | Chicago Surface Lines |
| DSR | Duluth St. Ry. |
| GRRR | Grand Rapids Railroad |
| SIG&E | Southern Indiana Gas & Electric Co. |
| TCL | Twin City Lines |
| TEP | Tennessee Electric Power Co. |
| TS | Transit Supply Co. |

Photo No.

C = for Claim Dept.

D = Damage to Car

# GLASS PLATE NEGATIVES

## Passenger Equipment

| | | | |
|---|---|---|---|
| Private Car | ARGS | (broken; 3 pieces) | |
| 827 | AFGS | (at East Side Station) | |
| 827 | AFGS | (at East Side Station, with crew) | |
| 827 | ARGS | (Oak & Xerxes dest. sign, with crew) | |
| 875 | GS | (double end car) | |
| 930 | GS | | |
| 1163 | AFGS | (high-speed suburban car) | |
| 1213 | ARGS | (at Nicollet Station) | |
| 1219 | ARGS | (at East Side Station) | |
| 1219 | ARGS | (at East Side Station) | |
| 1411 | AFGS | sliding front exit door (on transfer table) | |
| 1419 | PS | | 38 |
| 1419 | GS | | 38a |
| 1419 | F | | 16 |
| 1419 | F | | 16a |
| 1500 | GS | (on Grand Ave. line) | |
| 1506 | GS | (passengers at rear steps; demonstration) | |
| 1506 | ARGS | (passengers at rear steps; demonstration) | |
| 1550 | GS | | |
| 1575 | GS | Minnehaha Falls destination sign | |
| 1575 | GS | Lake Minnetonka destination sign | |
| 1575 | AFGS | | |
| 1609 | GS | (on transfer table) | |
| 1609 | GS | | |
| 1609 | AFGS | Lake Harriet destination sign | |
| 1751 | AFGS | with car (number ?) immedirately behind | |
| 1788 | AFGS | sliding front exit door (on transfer table) | |
| 2000-2000A | GS | (on transfer table) | |
| 2000-2000A | AFGS | (on transfer table) | |
| 2000 | ARGS | | |
| ? | RP | (showing double gates and steps) | |
| 1419 | IF FP | | 3a |
| 1419 | IF | | 5 |
| 1419 | IF | | 5a |
| 1573 | IF | | |
| 1573 | IF | | |
| 1574 | IR | | |
| 1574 | IR | | |

## Work Equipment

| | | | |
|---|---|---|---|
| 1 | GS | Snow Sweeper (at E. 7th St. Station) | 17 |
| 17 & 31 | 17 PS 31 GS | Work Car & Snow Plow (on transfer table) | 39 |
| 21 | PS | Wrecker, with two Snow Plows and one single truck Salt Car behind | 19 |
| 31 | GS | Snow Plow-Sweeper | |
| 31 | AFGS | Snow Plow-Sweeper | |
| 35 | GS | Rail Grinder | |

|  |  |  |  |
|---|---|---|---|
| 44 | GS | Sand Car | 62 |
| 44 | PS | Sand Car |  |
| 45 | GS | Sand Car |  |
| 58 | GS | Cupola Car (in operation) |  |
| 58 | GS | Cupola Car (in operation) |  |
| 58 | ARGS | Cupola Car |  |
| 58 | AFGS | Cupola Car |  |
| 59 | GS | Sprinkler Car (on transfer table) |  |
| 59 | ARGS | Sprinker Car (spraying liquid asphalt) |  |
| 59 | ARGS | Sprinkler Car (spraying water) |  |
| 77 | GS | Snow Plow |  |
|  | ARGS | University of Minnesota Switch Car |  |
| 1 | PS | St. Paul Southern Ry. Psgr-Bag. Car |  |
|  | AFGS | Snow Plow for St. Paul Southern Ry. (on transfer table) |  |

## Cars Sold to and Rebuilt for Seattle

|  |  |  |
|---|---|---|
| 300 | FP | showing front exit door (inside shop building) |
| 300 | AFGS |  |
| 302 | AFGS | (on transfer table) |
| 317 | GS |  |

## Miscellaneous

|  |  |  |
|---|---|---|
| Snelling Erecting Shop | bodies under construction | 43 |
| Snelling Erecting Shop | bodies and underframes | 68 |
| Snelling Erecting Shop | car body framing |  |
| 1162 ARGS | (front cropped) (inside erecting shop) |  |
| Snelling Truck Shop |  | 41 |
| Snelling Armature Shop |  | 42 |
| Snelling Station Yard |  | 64 |
| Snelling Station Yard (from Snelling Ave.) |  | 31 |
| Snelling Station Yard;fire protection tower in operation |  | 15c |
| Snelling Station Yard;fire protection tower |  | 66 |
| Wildwood Park (from White Bear Lake) |  |  |
| Wildwood Park Pavilion |  | 22a |

# FILM NEGATIVES

## GATE CARS WITH MOTORMAN'S DOOR

| | | | |
|---|---|---|---|
| 780 | GS | | 1553 |
| 813 | AFGS double end car | D | C-2961 |
| 813 | AFPS double end car | D | C-2962 |
| 813 | AFGS double end car | D | C-3046 |
| 813 | Body side at truss rods | D | C-3047 |
| 813 | Truss rods | D | C-3048 |
| 816 | GS | | 1570 |
| 902 | GS | | 1571 |
| 943 | AFGS | | 1753 |
| 943 | Body side at truss rods | | 1754 |
| 971 | AFPS | | C-3037 |
| 1046 | GS | | 1572 |
| 1095 | ARGS (1 Brill truck; 1 Baldwin truck) | | C-3063 |
| 1095 | AFPS | D | C-4174 |
| 1124 | AFPS | D | C-4120 |
| 1125 | GS | | 1547 |
| 1125 | AFPS | | C-3144 |
| 1125 | ARPS | D | C-4198 |
| 1126 | AFPS | | C-3106 |
| 1127 | AFGS | | C-3160 |
| 1128 | AFGS | | C-2956 |
| 1130 | AFPS | | C-3135 |
| 1130 | AFGS | D | C-3168 |
| 1130 | ARGS | D | C-3169 |
| 1130 | Body side at car number | D | C-3170 |
| 1130 | ARGS | D | C-4276 |
| 1130 | ARPS (street scene) | D | C-4277 |
| 1132 | AFGS | | C-2968 |
| 1151 | AFGS | D | C-2883 |
| 1151 | ARGS | D | C-2884 |
| 1151 | FP GS | D | C-2885 |
| 1158 | AFPS | | C-3129 |
| 1164 | AFGS | D | C-2902 |
| 1169 | AFPS | D | C-4208 |
| 1219 | AFPS | | 1548 |
| 1245 | GS | | 1573 |
| 1262 | ARGS | D | C-2927 |
| 1262 | Body side at the car number | D | C-2928 |
| 1263 | AFPS (poor quality) | D | C-4280 |
| 1290 | AFGS | | 1755 |
| 1292 | AFGS | D | C-2836 |
| 1293 | AFPS | D | C-2932 |
| 1298 | AFPS | | C-2913 |
| 1309 | AFGS | | C-2900 |
| 1312 | AFGS | | C-2820 |
| 1312 | AFPS | | C-2821 |
| 1313 | AFGS | D | C-2875 |
| 1319 | AFPS | | C-2924 |

## Front and Rear, Detail Views

| | | | | |
|---|---|---|---|---|
| 813 | F | (double end car) | D | C-2963 |
| 813 | FP PS | (double end car) | D | C-2964 |
| 971 | F | | | C-3038 |
| 971 | FP PS | | | C-3039 |
| 1125 | F | | | C-3145 |
| 1126 | F | | | C-3107 |
| 1127? | FP GS | | | C-3162 |
| 1128 | F | | | C-2957 |
| 1128 | FP GS | | | C-2958 |
| 1130 | F | | | C-3136 |
| 1130 | RP GS | | D | C-4278 |
| 1132 | PS | Body over rear truck | | C-2969 |
| 1158 | F | | | C-3130 |
| 1164 | FP GS | | D | C-2903 |
| 1293 | F | | D | C-2933 |
| 1313 | F | | | C-2876 |
| 1319 | FP PS | | | C-2926 |
| 1319 | F | | | C-2925 |

## Interior Views

| | | |
|---|---|---|
| FP | Twin City Heater | 826 |
| FP | Baker Heater | 827 |
| FP | Resistors, Air Compressor, Air Reservoir, all on FP. (762 rebuilt to Supply Car 2?) | 907 |

AVERY® PV119E

## FILM NEGATIVES

## GATE CARS WITH FRONT EXIT DOORS

| | | | | |
|---|---|---|---|---|
| 1269 | AFGS | (on transfer table) | D | C-4211 |
| 1274 | AFGS | | D | 6275 |
| 1274 | GS | (newly rebuilt 1928; street scene) | | 2930a |
| 1274 | GS | (newly rebuilt 1928; street scene) | | 2930b |
| 1274 | AFGS | (newly rebuilt 1928; UM Mpls campus) | | 2929a |
| 1274 | AFGS | (newly rebuilt 1928; UM Mpls campus) | | 2929b |
| 1281 | AFPS | | D | C-4911 |
| 1286 | AFPS | | | 5697 |
| 1289 | ARGS | top of car cropped; poor quality | | 5709 |
| 1325 | AFPS | | D | C-2849 |
| 1329 | ARGS | | | C-2979 |
| 1330 | AFPS | | | C-3043 |
| 1341 | AFPS | | D | C-4274 |
| 1342 | ARPS | | | C-3116 |
| 1350 | AFGS | poor quality neg. | D | 6523 |
| 1361 | AFGS | | | 6071 |
| 1370 | ARGS | | D | 6162 |
| 1372 | AFGS | | | C-2851 |
| 1379 | ARGS | top of car and front cropped | | 6049 |
| 1379 | ARGS | top of car cropped | | 6347 |
| 1387 | AFGS | | D | C-2862 |
| 1396 | PS | (on transfer table) | D | C-4184 |
| 1396 | AFGS | (on transfer table) (under repair) | D | C-4187 |
| 1406 | AFPS | | | C-5246 |
| 1411 | AFPS | | | C-3138 |
| 1414 | AFGS | | | 6504 |
| 1415 | AFPS | | | C-3090 |
| 1421 | AFGS | | | C-3097 |
| 1422 | AFGS | | | C-3070 |
| 1422 | AFPS | (on transfer table) | D | C-4199 |
| 1435 | AFPS | | | C-3171 |
| 1438 | AFPS | (street scene) | | C-4165 |
| 1438 | AFGS | | D | C-5571 |
| 1440 | AFGS | | | 1757 |
| 1463 | AFGS | | | C-2950 |
| 1463 | AFPS | | | C-2951 |
| 1471 | AFPS | | | C-2943 |
| 1475 | AFGS | | D | C-2904 |
| 1477 | AFPS | rear of car cropped | | C-4903 |
| 1478 | ARGS | | | C-5345 |
| 1481 | AFPS | | D | C-4955 |
| 1484 | AFPS | | | C-2857 |
| 1485 | AFGS | | | C-2970 |
| 1485 | AFPS | | | C-2971 |
| 1486 | AFGS | | | C-4244 |
| 1486 | AFPS | | | C-4245 |
| 1487 | AFGS | rear half of car cropped | D | C-4951 |
| 1487 | AFGS | | D | C-4236 |
| 1489 | AFPS | | | C-2991 |
| 1489 | GS | | | 1574 |

| | | | | |
|---|---|---|---|---|
| 1490 | ARGS | front half of car cropped | D | C-4954 |
| 1491 | ARGS | | | C-5253 |
| 1496 | AFGS | poor quality neg. | | 1549 |
| 1498 | ARGS | | | C-2867 |
| 1499 | AFGS | | | C-2953 |
| 1499 | AFPS | | | C-2954 |
| 1501 | AFGS | | | C-3157 |
| 1503 | ARPS | | | C-2873 |
| 1510 | AFGS | | | 1550 |
| 1516 | ARGS | front half of car cropped | D | C-4212 |
| 1519 | AFGS | | | C-3100 |
| 1525 | AFPS | | | C-3174 |
| 1527 | AFPS | | | C-4223 |
| 1535 | AFPS | (on transfer table) | D | C-4156 |
| 1541 | AFPS | | | C-2826 |
| 1541 | AFPS | | | C-2864 |
| 1542 | ARPS | | | C-2896 |
| 1542 | AFPS | inside shop; part of front cropped | | C-2975 |
| 1546 | AFPS | | | C-3132 |
| 1550 | AFGS | | | C-2915 |
| 1550 | AFGS | | | C-3002 |
| 1550 | AFPS | | | C-3003 |
| 1553 | AFPS | | | C-3086 |
| 1559 | F PS | inside shop; rear half cropped | D | C-4210 |
| 1578 | AFPS | | | C-3006 |
| 1588 | AFGS | | | C-2845 |
| 1589 | AFPS | | D | C-4291 |
| 1594 | AFGS | | D | C-3439 |
| 1594 | ARGS | | D | C-3440 |
| 1613 | GS | (on transfer table) platforms and top of car cropped | | 1416 |
| 1622 | PS | inside shop;under repair; part of car | D | 2738 |
| 1634 | GS | (deteriorated negative edges) | | 1575 |
| 1649 | AFGS | | D | C-3436 |
| 1706 | AFGS | | | C-2886 |
| 1709 | AFGS | | | C-3009 |
| 1712 | AFGS | | | C-3015 |
| 1713 | ARGS | | D | C-4259 |
| 1716 | ARGS | | | C-4104 |
| 1718 | AFGS | | | C-2922 |
| 1724 | AFGS | | | C-3022 |
| 1724 | GS | Body portion only; no platforms | | C-3023 |
| 1724 | AFPS | | | C-3073 |
| 1725 | AFGS | RP cropped | | C-4231 |
| 1727 | AFPS | | | C-3103 |
| 1727 | ARPS | | | C-3104 |
| 1734 | AFGS | | | C-2853 |
| 1740 | AFGS | | | C-2906 |
| 1742 | AFGS | | D | C-3017 |
| 1742 | ARGS | | D | C-3018 |
| 1747 | ARGS | at transfer table; bldg. obscures FP | D | C-4202 |
| 1751 | AFPS | | | C-2937 |
| 1752 | AFPS | | D | C-3146 |
| 1760 | AFPS | | | C-3076 |

| | | | | |
|---|---|---|---|---|
| 1769 | ARGS | (on transfer table) | | C-2824 |
| 1773 | AFGS | | | C-2996 |
| 1785 | AFPS | | | C-2982 |
| 1787 | AFPS | | D | C-2855 |
| 1788 | AFGS | first car rebuilt with FE doors | | 761 |
| 1788 | AFGS | passengers using FE doors | | 762 |
| 1788 | AFPS | | D | C-2965 |
| 1790 | GS | | | 1577 |
| 1792 | AFGS | | | C-2917 |
| 1794 | AFPS | | | C-2829 |
| 1797 | ARPS | | | C-2869 |
| 1799 | AFGS | in front of shop; under repair | D | C-2908 |
| 1802 | ARPS | front inside shop; poor quality neg. | | C-4159 |
| 1805 | AFPS | | | C-4108 |
| 1805 | AFGS | | | C-3028 |
| 1807 | AFPS | front of car cropped | D | C-4158 |
| 1809 | AFPS | | | C-2939 |
| 1810 | AFPS | | D | C-2890 |
| 1815 | AFPS | | | C-3031 |
| 1815 | AFGS | | D | C-3079 |
| 1815 | AFPS | | D | C-3080 |
| 1818 | AFPS | | | C-2941 |
| 1819 | AFPS | | | C-2945 |
| 1821 | AFPS | | | C-2919 |
| 1823 | GS | (deteriorated neg.) | | 1578 |
| 1824 | AFPS | | | C-3165 |
| 1825 | AFPS | | | C-2881 |
| 1825 | AFPS | | | C-3141 |
| 1827 | AFGS | | | C-2871 |
| 1829 | AFGS | | | C-2839 |
| 1829 | AFPS | | | C-3155 |
| 1831 | AFPS | | | C-2822 |
| 1843 | AFGS | | | C-2989 |
| 1844 | AFPS | | | C-3126 |
| 1851 | AFPS | | | C-3149 |
| 1853 | AFGS | rear half cropped | D | C-4115 |

## Front and Rear, Detail Views

| | | | | |
|---|---|---|---|---|
| Triple Gate and Step Detail | | | | 6346 |
| 1330 | F | | D | C-3044 |
| 1396 | FP | damage under repair; on transfer table | D | C-4186 |
| 1421 | F | poor quality neg. | | C-3098 |
| 1499 | F | | | C-2955 |
| 1501 | F | | | C-3158 |
| 1578 | FP PS | | | C-3007 |
| 1799 | FP | detail of damage under repair | D | C-2909 |
| 1815 | F | | | C-3032 |
| 1815 | FP GS | | | C-3030 |
| 1844 | F | | | C-3127 |

## Interior Views

| | | | | |
|---|---|---|---|---|
| 1274 | IR | (newly rebuilt 1928) | | 2931a |
| 1274 | IR | (newly rebuilt 1928) | | 2931b |
| 1405 | IF | front bulkhead | D | 6367 |
| ? | IR | rear bulkhead | | 6368 |
| ? | IF | from farebox and stanchion | | C-3442b |
| 166? | IR | | | 4033 |
| ? | IR | at farebox and stanchion | | 5856 |

# FILM NEGATIVES

## ONE/TWO MAN CARS

| | | | | |
|---|---|---|---|---|
| 1124 | AFGS | (on transfer table) | D | C-4298 |
| 1124 | AFGS | (street scene) | | C-5122 |
| 1124 | ARGS | top rear cropped | D | C-4946 |
| 1124 | AFGS | top front cropped | D | C-4957 |
| 1124 | AFGS | RP cropped | D | C-4309 |
| 1125 | AFGS | | D | C-4959 |
| 1126 | GS | underbody equipment damage only | | C-4821 |
| 1127 | ARGS | | D | C-4941 |
| 1127 | GS | underbody equipment damage only | | C-4912 |
| 1127 | AFGS | | D | C-4992 |
| 1128 | AFPS | | D | C-5081 |
| 1129 | Axxx | double end car | D | C-5153 |
| 1208 | AFPS | (poor quality neg.) | D | 5938 |
| 1211 | ARGS | front cropped (poor quality neg.) | D | 5958 |
| 1211 | ARGS | top and front cropped | D | 6031 |
| 1213 | AFPS | on transfer table | D | C-4799 |
| 1217 | AFGS | | D | 6638 |
| 1223 | AFGS | RP cropped | | 6005 |
| 1223 | ARGS | | | 6006 |
| 1224 | AFGS | | | C-5235 |
| 1224 | ARGS | | | C-5236 |
| 1224 | AFPS | | | C-5237 |
| 1224 | ARPS | | | C-5238 |
| 1240 | AFPS | inside shop building | D | C-5162 |
| 1242 | AFPS | | | C-5204 |
| 1300 | ARPS | | D | C-4216 |
| 1317 | AFGS | | | 6516 |
| 1325 | AFGS | E.S. Station RP in building | | C-5197 |
| 1325 | AFPS | E.S. Station | | C-5199 |
| 1327 | AFGS | | D | C-4942 |
| 1327 | | underbody equipment damage only | | C-4853 |
| 1328 | AFGS | newly rebuilt Hoyt & Hamline wye | | 4072 |
| 1328 | GS | newly rebuilt Hoyt & Hamline wye | | 4073 |
| 1389 | ARGS | top/front cropped; on trfr. tbl. | D | 5916 |
| 1389 | underbody equip. damage only; on trfr. tbl. | | | 5915 |
| 1468 | AFPS | | D | C-5577 |
| 1512 | AFGS | | | 6567 |
| 1520 | AFGS | Duluth Ave. Station | | C-5201 |
| 1520 | AFPS | Duluth Ave. Station | | C-5202 |
| 1520 | AFGS | | | 5877 |
| 1527 | AFPS | | | C-5124 |
| 1544 | AFGS | | | C-5583 |
| 1544 | AFPS | | | C-5584 |
| 1545 | AFGS | top & RP cropped; front step detail | | C-5603 |
| 1557 | AFPS | | D | 6477 |
| 1599 | AFGS | | | 7110 |
| 1603 | AFGS | | D | C-4936 |
| 1610 | AFPS | | D | C-4820 |
| 1627 | AFGS | | D | C-5161 |
| 1631 | AFPS | FP slightly cropped | D | C-5158 |

| | | | | |
|---|---|---|---|---|
| 1633 | AFGS | Duluth Ave. Station | | 6439 |
| 1670 | AFPS | on transfer table | | 6659 |
| 1675 | AFGS | | | C-5642 |
| 1702 | PS | underbody equipment detail | | C-5670 |
| 1718 | AFGS | RP cropped | D | C-4270 |
| 1719 | AFPS | | D | 5834 |
| 1724 | AFGS | first car with steel sides and ends | | 5172 |
| 1730 | AFPS | RP cropped; on transfer table | D | C-4293 |
| 1730 | AFGS | | | 6584 |
| 1735 | AFGS | top front cropped | D | 5926 |
| 1735 | AFPS | (deteriorated neg.) | | 5926A |
| 1738 | AFGS | all doors closed | | 4747 |
| 1738 | AFGS | door opening splitter function demonstration | | 4748 |
| 1738 | AFGS | door opening splitter function demonstration | | 4749 |
| 1740 | AFGS | | | C-5247b |
| 1740 | AFPS | | | C-5247 |
| 1740 | AFGS | | | C-5248 |
| 1745 | ARGS | front cropped (poor quality neg.?) | | none |
| 1745 | AFGS | poor quality neg.? | | 6559R |
| 1745 | PS | close-up shopman, new PS window guards | | 6620 |
| 1745 | AFPS | shopman, new PS window guards | | 6621 |
| 1756 | AFGS | | | C-5174 |
| 1769 | AFGS | (poor quality neg.?) | D | 5963 |
| 1783 | AFGS | UofM Mpls. Campus; newly rebuilt | | C-4517 |
| 1783 | AFGS | UofM Mpls. Campus; newly rebuilt | | 4518 |
| 1783 | GS | UofM Mpls. Campus; newly rebuilt | | 4520 |
| 1800 | AFGS | | D | C-4260 |
| 1813 | AFGS | | | C-5239 |
| 1813 | ARGS | | | C-5240 |
| 1813 | ARPS | | | C-5241 |
| 1813 | AFPS | | | C-5242 |
| 1825 | AFGS | (poor quality neg.) | D | C-4970 |
| 1828 | AFGS | RP and top front cropped | | 5925 |
| 1831 | AFPS | | | 6466 |
| 1834 | AFPS | | D | 5972 |
| 1845 | AFPS | shopman pointing to FP window | | 6623 |
| 1847 | AFGS | inside shop building | D | C-4283 |
| 1854 | AFGS | newly rebuilt 1931; retained RP gates; Hamline & Hoyt wye | | 4059 |
| 1854 | ARGS | | D | 5726 |

### Front and Rear Views

| | | | | |
|---|---|---|---|---|
| 1129 | F | double end car | D | C-5124 |
| 1223 | F | | | 6004 |
| 1325 | F | East Side Station | | C-5198 |
| ? | F | | D | C-5086 |
| ? | F | War Bond Sales Promotion red-white-blue color scheme 1506 or 1695 | | 5965 |
| 1828 | F | Nicollet Station | | 5924 |
| 1845 | PS | close-up, shopman pointing to FP window | | 6622 |

## Interior Views

| | | | |
|---|---|---|---|
| ? | FP | | C-5108 |
| ? | IF | close-up floor details at front bulkhead | 5712 |
| ? | FP | controller cover removed showing contacts | C-4247 |
| ? | FP | controller cover removed showing contacts | C-4248 |
| 1223? | IF | cross seats removed showing pipe & fittings | 6011 |
| 1228 | IF | aisle floor detail | C-4995 |
| 13?5 | IR | shows conductor at rear farebox | 4852 |
| 1520 | | front step details | 5878 |
| 1520 | | front step details | 5879 |
| 1536 | IF | | 6614 |
| 16?0 | IR | | 5945 |
| 1658? | IR | (poor quality neg.) | none |
| 1738 | IR | | 4751 |
| 1740 | IF | aisle floor detail | C-5000 |
| 1757 | IF | aisle floor detail | C-5003 |
| 1831 | IF | | 6467 |
| 1831 | IR | | 6468 |
| 1846 | IR | aisle floor detail | C-4998 |
| 1849 | IF | | 6171 |

# FILM NEGATIVES

## 1600-200 SERIES MOTOR-TRAILER TRAINS

| | | |
|---|---|---|
| 1590-1590A | AFGS | 820 |
| 1590A-1590 | ARGS | 821 |
| 1620-220 | AFGS | 1012 |
| 1622 | GS | 1551 |
| 222 | GS | 1552 |

## LIGHTWEIGHT CARS UNDER CONSTRUCTION

| | | |
|---|---|---|
| 2002 or 2003 | body framing | 944 |
| 2002 or 2003 | inside the erecting shop | 961 |
| 2004 or 2005 | on transfer table | 2097 |
| 2004 or 2005 | on transfer table | 2098 |
| 2006 series | in forge & structural shop | 2447 |
| 2006 series | in forge & structural shop | 2447 |
| 2006 series | in forge & structural shop | 2448 |

## LIGHTWEIGHT MOTOR-TRAILER TRAIN 2000-2000A
3 1/2" x 5 1/2" size--not numbered
1916

| | |
|---|---|
| GS | |
| ARGS | broad view |
| AFGS | narrow view |
| ARGS | narrow view |
| AFGS | narrow view behind shops adjacent to St. Anthony Ave. |
| GS | motor-trailer connection close-up |
| GS | motor-trailer connection close-up |
| GS | motor-trailer connection close-up |

## LIGHTWEIGHT MOTOR-TRAILER TRAINS

| | | | |
|---|---|---|---|
| 2000-2000A | AFGS | | 854 |
| 2002-2003 | AFGS | re-touched for publicity purposes | 1035 |
| 2002-2003 | ARGS | | 1036 |
| 2002-2003 | AFGS | re-touched for publicity purposes | 1037 |
| 2002 | IF FP | | 1040 |
| 2002-2003 | AFGS | | 1529 |
| 2002-2003 | multiple unit connection close-up | | 1532 |

# FILM NEGATIVES

## LIGHTWEIGHT CARS

| | | | | |
|---|---|---|---|---|
| 2003 | GS | | | 1652 |
| 2003 | AFGS | | | 1653 |
| 2004-2005 | GS | Como Park R/W | | 2151a |
| 2004-2005 | GS | Como Park R/W | | 2151b |
| 2004-2005 | AFGS | Como Park R/W | | 2152a |
| 2004-2005 | AFGS | Como Park R/W | | 2153a |
| 2004 | GS | UM Mpls Campus | | 2264a |
| 2004 | AFGS | street scene | | 2265a |
| 2006 | AFGS | | | 2603 |
| 2006 | AFPS | | | 2604 |
| 2006 | AFGS | UM Mpls Campus | | 2647a |
| 2006 | AFGS | UM Mpls Campus | | 2648 |
| 2006 | AFGS | UM Mpls Campus doors open | | 2649a |
| 2006 | AFGS | UM Mpls Campus doors open | | 2649b |
| 2006 | AFPS | UM Mpls Campus | | 2650 |
| 2000 | AFGS | | | 5682 |
| 2000 | FP | front step detail | | C-5101 |
| 2001 | ARPS | top RP cropped | | 5874 |
| 2015 | AFGS | RP inside building | | C-4662 |
| 2017 | AFPS | street scene | D | C-4689 |
| 2018 | AFPS | | | C-5646 |
| 2018 | PS | in shop, hoisting body off trucks | | 2774 |
| 2019 | AFGS | RP inside building | | C-5048 |
| 2020 | AFGS | | | C-5068 |
| 2020 | ARGS | | | C-5069 |
| 2022 | AFPS | | | C-2973 |
| 2022 | ARPS | | | 3843 |
| 2023 | AFGS | RP inside building | | C-5175 |
| 2024 and others | AFGS | Snelling Station yard | | 6163 |
| 2024 | AFPS | | | C-3040 |
| 2024 | AFPS | RP inside building | | C-2959 |
| 2024 | AFGS | RP cropped | | 5837 |
| 2025 | AFPS | | | C-2816 |
| 2027 | AFGS | | | C-3053 |
| 2027 | AFPS | | | C-3054 |
| 2027 | AFGS | | | C-4286 |
| 2028 | AFGS | RP inside building | D | C-4285 |
| 2029 | AFGS | FP cropped for step detail | | 5928 |

### Front and Rear Views

| | | | |
|---|---|---|---|
| 2002 | F | | 1531 |
| 2018 | R | | 2773 |
| 2019 | F | shop building in background | C-5049 |
| 2024 | PS FP | | C-2960 |
| 2024 | F | | C-3041 |
| 2024 | FP | step detail | 5836 |
| 2027 | F | | C-3055 |

## INTERIOR VIEWS

| | | | |
|---|---|---|---|
| 2002 | IF | | 1039 |
| 2003 | IF | | 1654a |
| 2003 | IR | | 1655a |
| 2003 | IF | | 1677 |
| 2003 | IR | | 1678 |
| 2004 or 2005 | | cross seat detail-front | 2076 |
| 2004 or 2005 | | cross seat detail-front | 2077 |
| 2004 or 2005 | | cross seat detail-rear | 2078 |
| 2004 or 2005 | | cross seat detail-rear | 2079 |
| 2004 or 2005 | FP | | 2130 |
| 2006 | FP | | 2605 |
| 2006 | IF | | 2606 |
| 2006 | IR | | 2607 |
| 2011 | IF | | 2651 |
| 2011 | IF | | 2651 |
| 2011 | IR | | 2652 |
| 2011 | FP | | 2832 |
| Foot controlled air brake | | | 4015 |
| 2014 | FP | poor quality neg. | 5931 |
| 2018 | FP | | 4058 |
| 2022 | FP | | C-4795 |

## STILLWATER LIGHTWEIGHT CARS

| | | | | |
|---|---|---|---|---|
| 4 | GS | Como Park R/W | | 1831 |
| 4 | PS | Como Park R/W | | 1832 |
| 1-4 | AFGS | | | 1833 |
| ? | Front truck-scraper detail | | | 2042 |
| 1 | AFGS | RP cropped on transfer table | D | C-4227 |
| 1 | AFGS | | D | 6279 |
| 2 | AFPS | | D | 5693 |
| 3 | A double end | rear half cropped | | C-4659 |
| 3 | A double end | | | C-4785 |
| 3 | A double end | | D | C-4792 |
| 3 | A double end | | D | C-4793 |
| 3 | A double end | | D | C-5125 |

## STILLWATER LIGHTWEIGHT CAR INTERIOR VIEWS

| | | | |
|---|---|---|---|
| ? | FP | | 1834 |
| ? | RP | | 1835 |
| ? | FP | from outside the front door | 1836 |
| ? | FP | controls from outside RH window | 1840 |
| ? | IR | | 1843 |
| 2 | FP | | 1888 |
| 2 | FP | toward ceiling; away from floor | 1889 |

# FILM NEGATIVES

## WORK EQUIPMENT

| | | | | |
|---|---|---|---|---|
| 2 | GS | Supply Car (Northern Car Co. 539) | | 736 |
| 2 | GS | Supply Car (ex 762) damaged neg. | | 1349 |
| 4 | ARGS | Wire Car rear view tower cropped | D | C-5129 |
| 7 | AFPS | Work Car (extension cab) | | C-4813 |
| 7 | AFPS | Work Car (extension cab) top/rear cropped | | 5803 |
| 13 | AFPS | Work Car | | 895 |
| 15 | ARPS | Work Car (extension cab) | | 894 |
| 17 | AFGS | Work Car | | 6562R |
| 17 | F | Work Car | | 6563R |
| ? | A | Shifter Car | | 733 |
| 50 | AFGS | Crane Car | | 3532 |
| 50 | GS | Crane Car | | 3533 |
| 50 | ARGS | Crane Car working on Rondo Ave. | | 6679 |
| 50 | AFGS | Crane Car working on Rondo Ave. | | 6680 |
| 61 | AFGS | Supply Car | | 1907 |
| 63 | AFGS | Work Car cab top cropped | D | 5849 |
| 71 | AF | Pavement Plow (winter scene) | | 735 |
| 74 | AF | Yard Crane | | 734 |
| 74 | AF | Yard Crane | | 2553a |
| 79 | AFGS | Snow Plow | | 3900 |
| ? | ARGS | Snow Plow small ice scraper attachment | | 3928 |
| 82 | ARPS | Snow Plow large ice scraper attachment | | 4241 |
| 82 | AFGS | Snow Plow | | 4242 |
| 83 | AFPS | Crane Car | | 2554b |

AVERY® c PV119E

# FILM NEGATIVES

## CONTRACT CARS UNDER CONSTRUCTION

| | | |
|---|---|---|
| CSL body framework | damaged negative | 1663 |
| CSL body framework | damaged negative | 1683 |
| CSL body framework | | 1685 |
| CSL bodies in General Repair Shop | | 1709 |
| CSL bodies in General Repair Shop | | 1710 |
| GRRR 11-18-1924 | | 1720 |
| CSL 6219 complete | | 1722b |
| CSL 6219 complete | | 1723b |
| TCL-DSR-GRRR 2-2-1925 General Repair Shop | | 1747a |
| TCL-DSR-GRRR 2-9-1925 General Repair Shop | | 1752 |
| TCL/DSR 2-14-1925 General Repair Shop | | 1760 |
| GRRR 2-16-1925 rear view | | 1761 |
| GRRR 2-16-1925 IF | | 1762 |
| GRRR 3-17-1925 complete | | 1801 |
| TS/DSR 3-23-1925 General Repair Shop | | 1813 |
| CSL 3258 IF FP | | 1818 |
| CSL 3258 IF | | 1819 |
| TEP/SIG&E 6-18-1926 Erecting Shop | | 2149 |
| TEP/SIG&E 6-18-1926 Erecting Shop | | 2150 |
| TEP/SIG&E 9-8-1926 Erecting Shop | | 2209a |
| TEP/SIG&E 9-8-1926 Erecting Shop | (some complete) | 2209b |
| TEP/SIG&E 9-8-1926 Erecting Shop | | 2210 |
| TEP/SIG&E 9-8-1926 Erecting Shop | | 2210 |

## FILM NEGATIVES

## CONTRACT CARS COMPLETED

| | |
|---|---|
| CSL 6219, 6222 on transfer table | 1724 |
| GRRR IF 3-17-1925 | 1802 |
| TEP ? GS Como Ave. @ Fairgrounds | 2213a |
| TEP ? GS Como Ave. @ Fairgrounds | 2213b |
| TEP ? GS Como Park R/W | 2214 |
| TEP 131 AFGS Como Park R/W | 2215a |
| TEP 131 AFGS Como Park R/W | 2215b |
| TEP 131 F | 2216a |
| TEP 131 F | 2216b |
| TEP 131 IF | 2217 |
| TEP 137 AFGS | 2234 |
| TEP 601 GS UM Mpls Campus | 2246a |
| TEP eight cars loaded on railroad flat cars | 2258 |
| TEP eight cars loaded on railroad flat cars | 2259 |
| TEP eight cars loaded on railroad flat cars | 2260a |
| TEP eight cars loaded on railroad flat cars | 2260b |
| TEP ? GS loaded on railroad flat car | 2261b |
| TEP 604 F | 2262a |
| TEP 604 F | 2262b |
| TEP 604 IF | 2263a |
| TEP 604 IF | 2263b |
| SIG&E 411 AFGS UM Mpls Campus | 2268a |
| SIG&E 411 AFGS UM Mpls Campus | 2268b |
| SIG&E 411 GS UM Mpls Campus | 2269b |
| SIG&E 413 IF | 2270 |
| SIG&E 413 IF | 2270 |
| SIG&E 413 IR | 2271 |
| SIG&E 413 IR | 2271 |
| SIG&E 402 AFGS UM Mpls Campus | 2272b |
| SIG&E 402 GS Como Ave. | 2273a |
| SIG&E 402 GS Como Ave. | 2273b |
| SIG&E 402 IF | 2274 |
| SIG&E 402 IF | 2274 |

# FILM NEGATIVES

## TRUCKS

| | | | |
|---|---|---|---|
| Twin City #11 | complete | 4" x 6" size | 904 |
| Twin City #11 | complete | 4" x 6" size | 905 |
| Twin City #11 | truck frame | 4" x 6" size | 924 |
| Twin City #11 | truck frame | 4" x 6" size | 925 |
| Twin City #12 | with scrapers | | 2043 |
| Twin City #12 | head-on view | | 2180 |
| Twin City #9RB | | | 2693 |
| Twin City #9RB | with scrapers | | 2694 |
| Arch Bar truck from Crane Car 83 (in shop) | | | 3807 |

## BOATS

| | |
|---|---|
| Boat under construction in Excelsior boat house | 158 |
| Boat under construction in Excelsior boat house | 160 |
| COMO on boatway beside boat house | 165 |
| Excelsior Docks winter view | 166 |

## PCC CARS

| | | | | |
|---|---|---|---|---|
| 1547 | PS FP | roof cropped | | 6038 |
| 299 | GS | center door detail only | | 7089 |
| 311 | AFGS | poor quality neg. | D | 7004 |
| 314 | GS | | | 6678 |
| 354 | AFGS | | | 7015 |
| 311? | IF FP | thru front doors at motorman´s position | | 7005 |
| ? | GS | front step detail only | | 7086 |

## OVERHEAD TOWER TRUCKS

| | | | |
|---|---|---|---|
| 105 | 1930 GMC | | 3901 |
| 105 | 1930 GMC | tower raised vertically | 3902 |
| 134 | 1937 Ford | | 5855 |

## WRECKS

| | | |
|---|---|---|
| 1610/1629 | wreck remains at Snelling Shops | C-4913 |
| 1610/1629 | wreck remains at Snelling Shops | C-4914 |
| 1610/1629 | wreck remains at Snelling Shops | C-4915 |
| 1699 | at Snelling Shops (poor quality) | C-5035 |
| 1699 | IF | C-5036 |

# FILM NEGATIVES

## SNELLING SHOPS

### General Repair Shop

| | |
|---|---|
| TCL, DSR, GRRR Lightweight Cars under construction 2-16-1925 | 1763 |

### Erecting Shop

| | |
|---|---|
| Car body on side | 1977 |

### Sequence of Turning Car Body on Side

| | |
|---|---|
| Body hooked up to overhead crane | 2704 |
| Hoisting vertically | 2705 |
| Tilting | 2706 |
| On Side--roof view | 2708 |
| On Side--underframe view | 2709a |
| On SIde--underframe view | 2709b |

### Rehabilitation Program

| | |
|---|---|
| RP PS Gate Car | 2737 |
| One/Two Man Cars | C-4984 |
| One/Two Man Cars | 5230 |
| One/Two Man Cars (some on side; roof view) | 5232 |
| One/Two Man Cars (some on side; underframe view) | 5233 |
| Crane Attachment for tilting car bodies on side | 5234 |

### Shop Employees

| | |
|---|---|
| A Foreman´s Retirement | 6199 |
| A Foreman´s Retirement | 6199 |

## CAR STATIONS

| | | |
|---|---|---|
| Snelling yard | | 28 |
| Snelling yard | | 2389 |
| Snelling yard | all fire sprinklers in action | 2391 |
| Snelling yard | all fire sprinklers in action | 2392 |
| Snelling yard | one fire sprinkler in action | 2393 |
| Snelling yard | all fire sprinklers in action | 2400 |
| Snelling yard | all fire sprinklers in action | 2401 |
| Snelling yard | all fire sprinklers in action | 2402 |
| Snelling yard | some fire sprinklers in action | 2404 |
| Snelling yard | some fire sprinklers in action | 2406 |
| Snelling yard | some fire sprinklers in action | 2407 |
| Snelling yard | some fire sprinklers in action | 2408 |
| Lake St. yard | | 2544b |
| Lake St. yard | | 2545 |
| Lake St. yard | | 2546b |

| | |
|---|---|
| Nicollet yard | 2547 |
| Nicollet yard | 2548 |
| Nicollet yard | 2549b |
| North Side yard | 2550b |
| North Side yard | 2551 |
| North Side yard | 2552 |
| Entrance to Snelling Station at Snelling & University | 6026 |

## MISCELLANEOUS

| | |
|---|---|
| Drawing 35D-8060 Lightweight Car (1-4 style) | 1586 |
| Drawing 35B-3148 Lightweight Car 2002 | 1616 |
| Street Scene Location unidentified | 4487 |
| Street Scene Snelling and Como | 4489 |
| Street Scene Snelling and Como | 4490 |
| Street Scene Location unidentified | 4492 |
| Close-up view of a fender | C-4991 |
| Car roof at trolley boards showing a rod that pierced the roof | 5943 |
| F. S. Morgan, L. G. Barnes and ? at office desk | 5672 |
| F. S. Morgan, L. G. Barnes and ? at office desk | 5673 |

## DESTINATION ROLL SIGNS

| | |
|---|---|
| 1 | Nicollet Station (has LAKE HARRIET reading) |
| 1 | Nicollet Station (from PCC car) |
| 1 | Nicollet Station (from Lightweight car; side sign) |
| 1 | North Side Station |
| 1 | North Side Station (from 1563; has LAKE HARRIET, MINNEHAHA FALLS, and ST. LOUIS PARK readings) |
| 1 | East Side Station |
| 4 | Lake St. Station |
| 1 | Snelling Station (from 1532) |
| 3 | Duluth Ave. Station |
| 2 | St. Paul |
| 1 | St. Paul (from 1136) |

## FRONT BULKHEAD TRIM PIECE WITH CAR NUMBER

| | |
|---|---|
| #4 | Stillwater lightweight car; rebuilt double end. |
| #1136 | Last used as Fairgrounds Office Car 1951 or 1952. |
| #1230 | Double end car for Fort Snelling Extension line. |
| #1329 | Lowest numbered survivor of 1920-1924 front exit rebuilding program which were NOT later rebuilt for one/two man operation. |
| #2014 | Lightweight car. |

## BUILDER´S PLATE

St. Louis Car Company (from PCC car #299)

Donated to MTM 5-8-91

**RUSSELL L. OLSON**
8212 Sheridan Ave. So.
Bloomington, Minn. 55431

# TCL TRACINGS & DRAWINGS

## SUMMARY

| | EQ | BLDGS | MHS<br>EDNELSON<br>BILL OLSEN | MSM<br>SANDBERG |
|---|---|---|---|---|
| TCL | | | | |
| V | 490 | 82 | 572 | 77 |
| WP | 51 | | 51 | 1 |
| b | | 40 | 40 | 11 |
| | 541 | 122 | 663 | 89 |
| LWNESC Co | | | | |
| V | | | | 107 |
| dp | | | | 40 |
| gp | | | | 7 |
| b | | | | 2 |
| | | | | 156 |
| TOTAL | | | 663 | 245 |

908

DONATED TO THE
MINNESOTA STREETCAR
MUSEUM INC.

@ CHSL SHOP/CARHOUSE
LAKE HARRIET, MPLS

# TWIN CITY RAPID TRANSIT CO.
# LIGHT WEIGHT NOISELESS ELECTRIC STREET CAR CO.
# MECHANICAL DEPARTMENT DRAWINGS

Collection of
Frank E. Sandberg, Jr.
4322 Lake Point Ct.
Shoreview MN 55126-3118
(651) 490-1985

Contained in six large storage tubes:
#1 labeled: Cable Cars, Early Streetcars, Work Equipment, Double Deck, Duluth Incline.
#2 labeled: Standard Cars, Interurban, and Work Equipment as Built.
#3 labeled: Double Deck Car, Lighweight Cars.
#4 labeled: Work Equipment.
#5 labeled: TCL Work Equipment, 51'7" Interurban, Miscellaneous.
#6 labeled: Light Weight Noiseless Electric Street Car Co.
plus #7: one small storage tube, not labeled.

The materials on which these drawings are made are indicated in the index by the following letters.
v = vellum
dp = drafting paper (originally sepia?) which has turned brown with age and become brittle; some drawings have become torn and tattered.
wp = drafting paper, white.
qp = quadrille paper.
b = blueprint (paper).

The drawings have not been measured for size. The following comments are generalizations.
Vellum: range from 9" x 12" to 36" x 72". The letters in many drawing numbers indicate:
A 9" x 12"
B 12" x 18"
C 18" x 24"
D 24" x 36"
E 36" x 48"
However the lengths may be greater as required by the needs of the particular drawing. For example, many drawings are to the scale of 1" = 1'0" so car elevation and section drawings can be as much as 36" x 72".
Drafting Paper and Ordinary Paper range from approximately 9" x 12" to 12" x 18".
Quadrille Paper are smaller than 9" x 12".
Blueprints are the same size as the original drawing.

On the Drawing Index the Category or Series Number and Title are centered, followed by the Drawing Number, Drawing Title, Drawing Date, Drawing Material, and Storage Tube Number.

## DRAWING INDEX

## TWIN CITY RAPID TRANSIT CO.
## TWIN CITY LINES

### Single Truck Passenger Cars

| | | | | | |
|---|---|---|---|---|---|
| 332 | 2-6130 | Minneapolis St. Ry. Cable Grip Car [#305] | 1-11-18xx | v<br>b | 1<br>3 |
| 334 | 2-6135 | Minneapolis St. Ry. Summer Car [#369] | 2-22-1890 | v | 1 |
| 339 | 2-6129 | Minneapolis St. Ry. Closed Car [#365] | 1-3-1891 | v | 1 |
| E25#6 | | Twenty-Two Ft. Car with Safety Gate | 12-1-1896 | v | 1 |

## Standard Double Truck Cars 1900-1905

| | | | | |
|---|---|---|---|---|
| D26#6 | Standard Double Truck Car Elevation and Section | 10-6-1900 | v | 5 |
| D30#10 | 37 ft. Double Truck Car Side Elevation, Floor Plan | 2-23-1900 | v | 5 |
| D51#6 | Floor Plan for 45 ft. Car | 3-14-1903 | v | 5 |
| D53#6 | Details of 45 ft. Car | 9-5-1903 | v | 5 |
| D63#6 | Underframing for 45 ft. Car 1904 Pattern | 2-10-1904 | v | 5 |
| 10-706 | Post Locations and Bumper Construction for 1905 Car with Full Steel Underframe | 4-17-1905 | v | 5 |
| 10-713 | Plans and Sections of Forward and Rear Bulkheads for 46' 9 5/8" Car | 10-25-1905 | v | 5 |

## 1904 Double Deck Car

| | | | | |
|---|---|---|---|---|
| D-57 | Floor Framing of 47 ft. Double Deck Car | 11-11-1903 | v | 3 |
| E73#6 | 4-520 Screens | 7-7-1904 | v | 3 |
| 10-702 | Double Deck Car | 4-21-1904 | v | 1 |
| None | No Title (Floor Plan of the Upper Deck) | none | v | 1 |
| 1-617 | Seat Details and Junction Box | 6-7-1904 | v | 3 |
| 1-617A | Bracing for Upper Structure | 7-22-1903 | v | 3 |
| 1-618 | General Arrangement of Canopy Piping and Detail of Lamp Blocks and Screens | 5-24-1904 | v | 3 |
| 1-619 | Wiring Diagram | 8-4-1904 | v | 3 |
| 1-620 | Detail of Stairs | 3-18-1904 | v | 3 |
| 1-620A | Register Fixtures and Signal Details | 6-1-1904 | v | 3 |
| 1-621 | Upper and Lower Truss Rods | 3-5-1904 | v | 3 |
| 1-622 | Gate Opening Lever | 6-3-1904 | v | 3 |
| 1-623 | Detai of Roof Parts | 3-28-1904 | v | 3 |
| 1-624 | Carline and Deck Detail | 3-12-1904 | v | 3 |
| 1-625 | Detail of Fittings in Canopy | 3-15-1904 | v | 3 |

## 1906 Double Deck Car

| | | | | |
|---|---|---|---|---|
| 10-712 | 46' 9 5/8" Double Deck Car | 10-6-1905 | v | 1 |
| 10-714 | Details of Stairs | 12-23-1905 | v | 3 |
| 10-715 | Steps for Upper Deck in Front Vestibule | none | v | 3 |
| 10-717 | Side Sign for Double Deck | 2-17-1906 | v | 3 |
| 10-718 | Front Sign | 4-9-1906 | v | 3 |
| 1-680 | Section of Upper Deck | 10-11-1905 | v | 3 |
| 1-6305 | Rear Part of Upper Deck | 2-24-1906 | v | 1 |
| 1-6310 | Operating Handle for Controllimg Front and Rear Gates | 4-4-1906 | v | 3 |
| 4-573 | Malleable Casting | 10-31-1905 | v | 3 |
| 4-574 | Malleable Post Shoe | 11-1-1905 | v | 3 |
| 4-575 | Post and Rafter Intersection | 11-2-1905 | v | 3 |
| 4-576 | Anchor Bolt | 11-6-1905 | v | 3 |
| 4-577 | Seat | 11-4-1905 | v | 3 |
| 4-5208 | Gates for Front Vestibule | 1-23-1906 | v | 3 |
| 4-5211 | Malleable Details for Hand Rails | none | v | 3 |
| 4-5212 | Window Screens | 3-9-1906 | v | 3 |
| 4-5216 | Post Detail | 4-7-1906 | v | 3 |
| 6-492 | Special Curtain | 10-27-1905 | v | 3 |
| 6-493 | Bracket and Curtain Fixture | 1-30-1906 | v | 3 |
| 6-4266 | Curtain Bracket | 3-16-1906 | v | 3 |
| 6-4267 | Deck Light Screen | 4-11-1906 | v | 3 |
| 9-947 | Guard Rail | 4-10-1906 | v | 3 |

## Proposed Interurban Car

| | | | | |
|---|---|---|---|---|
| 35E936 | No Title (Elevation and Floor Plan) | 10-30-1909 | v<br>b | 5<br>2 |
| 35E937 | No Title (Sections) | 11-1-1909 | v | 1 |

## Duluth St. Ry. Incline Car

| | | | | |
|---|---|---|---|---|
| 37E1270 | Elevations Duluth Incline [220-221] | 7-16-1910 | v | 1 |
| 87E1269 | Truck Assembly Duluth Incline | 8-9-1910 | v | 1 |

## 35 Series Car Elevations

| | | | | |
|---|---|---|---|---|
| 35C2693 | 800 Type Converted to One Man Car | 4-18-1919 | v | 1 |
| 35C4040 | Measurements from Car 1323 | 1-28-1930 | v | 3 |
| 35C4510 | Single End, One Man, Two Man Car Jackson St. line 1124-1128,1131 | 7-6-1932 | v | 3 |
| 35D2969 | 45 ft. Cars 2002-2003 | 5-2-1922 | v | 3 |
| 35D4375 | Double End Car 1230 | 9-3-1931 | v | 1 |
| | | | b | 3 |
| 35E400 | Class K-8-C | 1-2-1909 | v | 5 |
| | | | b | 2 |
| 35E1350 | Section and Elevation Class L-8 | 3-11-1911 | v | 1 |
| 35E2115 | Rail Welding Car [58] | 2-13-1914 | v | 5 |
| 35E2205 | Combination Work Car [UofM Switch Car] | 9-9-1914 | b | 2 |

## 36 Series Car Details

| | | | | |
|---|---|---|---|---|
| 36C5021 | Operator's Seat One Man Cars | 7-5-1935 | v | 3 |
| 36D3451 | Plan and Elevation of 45'6" x 9'0" Car 2000-2030 | 10-22-1926 | v | 3 |
| 36D4307 | Front End for Cars Between 1336 and 1854 | 4-9-1931 | v | 3 |
| 36D4314 | Front End Layout for Standard Front Exit Cars | 4-21-1931 | v | 3 |

## 37 Series Underframe Details

| | | | | |
|---|---|---|---|---|
| 37E850 | Class K | 8-11-1909 | v | 5 |

## 39 Series Work Car Elevations and Underframes

| | | | | |
|---|---|---|---|---|
| 10-711 | Delivery Car [became 34] | 8-30-1905 | v | 5 |
| 39E1046 | Standard Work Car [wood deck and sideboards] | 1-17-1909 | v | 4 |
| | | | b | 2 |
| 39E1192 | Sand Car [43-45] | 11-2-1910 | v | 5 |
| | | | b | 5 |
| 39E1772 | Refuse Car [49] | 3-17-1912 | v | 4 |
| | | | b | 2 |
| 39E2233 | Sprinkler Car [59] | 11-7-1914 | v | 1 |
| 39E2381 | Standard Work Car [steel deck and sideboards] | 1-19-1916 | v | 4 |
| | | | b | 2 |
| 39E2608 | Snow Plow Single Shear [75-82] | 6-15-1917 | v | 1 |
| | | | b | 2 |

## 15 Series Boats

| | | | | |
|---|---|---|---|---|
| 15D3260 | One Man, Diesel Engine | 9-7-1925 | v | 1 |
| 15E2263 | 73 ft. Express Boat | 2-18-1915 | b | 7 |

## 24 Series Truck Brake Arrangements

| | | | | |
|---|---|---|---|---|
| 24D839 | Twin City No. 5 | 5-6-1917 | v | 3 |

## 27 Series Truck Assembly

| | | | | |
|---|---|---|---|---|
| 27D798 | Twin City Type | 5-9-1901 | v | 1 |
| 27D2536 | No. 11 Truck | 3-15-1917 | v | 3 |

## Tower Truck

| | | | | |
|---|---|---|---|---|
| 78D5263 | Outline of #134 Tower Truck | 3-6-1937 | v | 1 |

## Unclassified

| | | | |
|---|---|---|---|
| Transit Supply Co. Drawing: Aluminum Lamp Shade to fit over Bryant Lamp Receptacle #4146 and WH 50 watt 105 volt Mill type Mazda B Lamp P19 Bulb | no date | wp | 6 |

## LIGHT WEIGHT NOISELESS ELECTRIC STREET CAR COMPANY

## GRAND RAPIDS-DULUTH-STILLWATER ORDER

### Drawings Specified for all Three

| | | | | |
|---|---|---|---|---|
| 125 | Foot Rail Socket | 1-2-1925 | dp | 6 |
| 144 | Seat Casting | 1-27-1925 | dp | 6 |
| 151 | Sill Guard   All Cars | 1-26-1925 | dp | 6 |
| 169 | Fare Box Bracket | 2-21-1925 | dp | 6 |
| 173 | Filler Strip for Door | 2-12-1925 | dp | 6 |
| 174 | Hand Brake Assembly | 2-12-1925 | dp | 6 |
| 175 | Long Seat Arm + Support Arrangement | 2-12-1925 | dp | 6 |
| 176 | Underframe Stress Diagram & Computation<br>[torn and tattered; drawing number loose] | ? 1925 | dp | 6 |
| 180 | Window Wearing Strip | 2-11-1925 | dp | 6 |
| 188 | Seat Angles | 1-25-1925 | dp | 6 |
| 189 | Foot Rest Rail | 2-26-1925 | dp | 6 |
| 191 | Car Brake Details  Pin for Brake Pull Rod<br>(Twin City Lines drawing) | 3-18-1925 | v | 6 |
| 193 | Rafter Anchor Angle | 2-26-1925 | dp | 6 |
| 195 | Bracket for Jack Shaft for Door Operator | 3-4-1925 | dp | 6 |

### Drawings Unspecified: Assumed for all Three

| | | | | |
|---|---|---|---|---|
| 186 | Foot Rest Socket | 2-27-1925 | dp | 6 |
| 202 | Bracket for Electric Valve | 3-13-1925 | dp | 6 |
| 215 | Button to lock Heater Door in open position | 3-31-1925 | dp | 6 |
| 267 | Resistance Grid<br>[damaged] | 6-17-1925 | dp | 6 |

### Drawings Specified for Grand Rapids Car

| | | | | |
|---|---|---|---|---|
| 106 | Template Assembly Diagram | 10-28-1924 | v | 6 |
| 119 | Details of Underframe Sills | 12-10-1924 | v<br>b | 6<br>1 |
| 172 | Eye Bolt for Adjustable Clamp Lever of Pneumatic Door Engine | 1-11-1925 | dp | 6 |
| 184 | Bracket for Securing Window Stool to Post | 2-23-1925 | dp | 6 |
| 187 | Bracket for Securing Window Stools to Post | 2-14-1925 | dp | 6 |
| 269 | Skirt Section | 7-30-1925 | dp | 6 |

## Drawings Specified for Duluth and Stillwater Cars

| | | | | |
|---|---|---|---|---|
| 104 | One Man Car<br>[A non-employee has made alterations and additions] | 5-2-1924 | v | 1 |
| 135 | Grip for Hand Strap | no date | dp | 6 |
| 158 | Hanger for Hand Straps | 2-2-1925 | dp | 6 |
| 182 | Door Engine Tray | 2-19-1925 | dp | 6 |
| 1xx | Air Piping Diagram<br>[badly torn] | 1-12-1925 | dp | 6 |
| 264 | Drawhead for Underframe<br>[damaged] | no date | dp | 6 |
| CR-116 | Details of Underframe Sills<br>(Twin City Lines drawing) | 6-11-1924 | v | 1 |
| CR-124 | Details of Steel Underframe<br>(Twin City Lines drawing) "Obsolete" | 7-24-1924 | v | 1 |

## Drawings Specified for Stillwater Cars

| | | | | |
|---|---|---|---|---|
| 237 | Advertising Sign Molding - Vestibule<br>[damaged] | 4-22-1925 | dp | 6 |

## CHATTANOOGA-NASHVILLE-EVANSVILLE ORDERS

## Drawings Specified for all Three

| | | | | |
|---|---|---|---|---|
| 33 | Bolster Connection | 7-11-1927 | dp | 6 |
| 275 | Car Types | no date | v | 3 |
| 278 | Door Frame | 5-7-1926 | v | 6 |
| 281 | Detail of Door Equipment | 5-14-1926 | v | 6 |
| 285 | Sanitary Hand Strap | 5-15-1926 | v | 6 |
| 288 | Light Locations & Wiring Diagram | 5-18-1926 | v | 6 |
| 290 | Elevation and Sections of Folding Doors | 5-20-1926 | v | 6 |
| 307 | Window Curtain Bracket | 6-24-1926 | v | 6 |
| 311 | Section of Skirt | 6-26-1926 | v | 6 |
| 312 | Sign Box Bracket | 7-5-1926 | v | 6 |
| 315 | Window Wiper Bearing | 7-9-1926 | v | 6 |
| 317 | Door Engine Signal Light Arm | 7-15-1926 | v | 6 |
| 324 | Hose Bracket | 8-20-1926 | v | 6 |
| 328 | Bracket for Cut-Out Switch | 9-3-1926 | v | 6 |
| 329B | Life Guard Springs | 8-1-1926 | v | 6 |
| 331 | Wiring Diagram | 9-22-1926 | v | 6 |
| 332 | Intake Strainer Anchor | 10-6-1926 | v | 6 |
| 338 | Door Casting | 9-1-1927 | v | 6 |
| 834 | Bolster Reinforcing Plates | 7-11-1927 | v | 6 |

## Drawings Unspecified: Assumed for all Three

| | | | | |
|---|---|---|---|---|
| 273 | Method of Fastening Seat to Car Side | 5-5-1926 | dp | 6 |
| 274 | Step Assembly for Straight Side Cars | 5-4-1926 | v | 6 |
| 279 | Reinforcing Plate Over Doors | 5-12-1926 | v | 6 |
| 280 | Layout of Door Operating Equipment | 5-13-1926 | v | 6 |
| 294 | Rubber Bumper | no date | v | 6 |
| 295 | Dash Light Reflector | 5-28-1926 | v | 6 |
| 297 | Window Guard Casting | no date | v | 6 |
| 300 | Ventilator<br>[Date?] | 1-15-1925 | v | 6 |
| 305 | Climbing Step | 6-23-1926 | dp | 6 |
| 306 | Ventilator | 6-28-1926 | v | 6 |
| 308 | Window Guards | 6-24-1926 | v | 6 |
| 314 | Gutter Over Doors | 7-7-1926 | v | 6 |
| 320 | Hand Brake Sheave | 7-19-1926 | v | 6 |
| 326 | Emergency Draw Bar Hanger for Inside of Skirt | 8-21-1926 | v | 6 |

| | | | | |
|---|---|---|---|---|
| 327 | Door Pull | 8-25-1926 | v | 6 |
| 330 | Air Piping Diagram Double End Cars | 9-21-1926 | v | 6 |
| 335 | Bolster Reinforcement | 7-15-1927 | v | 6 |
| 336 | Method of Applying Reinforcing Plates | 8-4-1927 | v | 6 |
| 502 | Platform Steel Double End Cars | 4-22-1926 | v | 6 |
| 619 | Pamphlet Holders | 7-15-1926 | v | 6 |
| - | Brace for Brake Release Spring Bracket | no date | v | 6 |
| - | No Title (Post Section?) | no date | dp | 6 |
| - | Seat over Step Well | no date | dp | 6 |
| - | Two drawings on one page: Maple Batten-Vestibules and Aluminum Plate-Vestibules | 6-23-1926 | dp | 6 |
| - | Corner Pieces over Doors [damaged] | 7-22-1926 | dp | 6 |
| - | Center Sill Bracing Straight Floor Cars | no date | v | 6 |
| - | Hunter Sign Type 129 | 5-10-1926 | qp | 6 |
| - | Insulation for SG Resistors | no date | qp | 6 |
| - | Door Corner Post | no date | qp | 6 |

### Drawings Specified for Chattanooga and Nashville Cars

| | | | | |
|---|---|---|---|---|
| 289 | Foundation Rigging Double End Cars | 5-20-1926 | v | 6 |
| 299 | Section at 8'6" Width | 6-9-1926 | v | 6 |
| 303 | Seat Leg for Operator's Folding Seat | 6-22-1926 | v | 6 |
| - | Vestibule center Posts Tie | no date | dp | 6 |
| - | Lighting Circuits | 7-12-1926 | qp | 6 |

### Drawings Specified for Chattanooga and Evansville Cars

| | | | | |
|---|---|---|---|---|
| 291 | Trolley Rope Guard | 5-26-1926 | v | 6 |
| 302 | Sign Box | 6-20-1926 | v | 6 |
| 309 | Hand Rail | 6-26-1926 | v | 6 |
| 310 | Skirt for Ends of Car | 7-1-1926 | v | 6 |
| 319 | Life Guard | 7-19-1926 | v | 6 |
| 323 | Door Sign | 8-17-1926 | v | 6 |
| 325 | Diagram of Clearances | 8-17-1926 | v | 6 |
| 509 | Mounting Board & Cabinet for No. 1 End of Car | 7-5-1926 | v | 6 |
| 510 | Hand Rail Casting | no date | v | 6 |
| - | Corner PL | no date | dp | 6 |
| - | Channel Tie to Center Sills | no date | dp | 6 |
| - | Hood Rafter Layout | no date | v | 6 |
| - | Reinforcing Bar for Dash | no date | qp | 6 |

### Drawings Specified for Chattanooga Cars

| | | | | |
|---|---|---|---|---|
| 321 | Hand Brake Pull Rod | 7-19-1926 | v | 6 |
| 500 | 8'6" x 40'0" Car D.E. for Chattanooga | 2-12-1926 | v | 3 |
| 501 | Underframe of Chattanooga Car | 4-19-1926 | v | 6 |
| 503 | Plywood for 10 D.E. Chattanooga Cars | 4-2-1926 | v | 6 |
| 504 | Lining Floor Reinforcements | 4-21-1926 | v | 6 |
| 506 | Location of Equipment | 5-13-1926 | v | 6 |
| 507 | Platform Equipment Layout #2 End | 6-2-1926 | v | 6 |
| 508 | DH-16 Westinghouse Compressor Hanger Bolts | 6-18-1926 | v | 6 |
| 511 | Door Layout | 7-30-1926 | v | 6 |
| - | Door Engine Jack Shaft Brace | 1-20-1927 | dp | 6 |
| - | Door Rod & Lever Layout | no date | v | 6 |
| - | Location of K-35 Controller | no date | v | 6 |
| - | Line Breaker Hanger | no date | v | 6 |

## Drawings Specified for Nashville Cars

| | | | | |
|---|---|---|---|---|
| 316 | Upper Flange for Stanchions | 7-12-1926 | qp | 6 |
| 318 | Special Ell for Door Engines | 7-16-1926 | v | 6 |
| 322 | Hand Rail Castings | no date | v | 6 |
| 600 | Cars for Nashville, Tennessee | 1-2-1926 | v | 3 |
| 603 | Plywood for 10 D.E. Nashville Cars | 4-2-1926 | v | 6 |
| 604 | Detail of Step | 5-24-1926 | v | 6 |
| 605 | Trolley Rope Guard | 5-26-1926 | v | 6 |
| 607 | Lining Floor Reinforcements | 5-29-1926 | v | 6 |
| 608 | Body Bolster | 5-28-1926 | v | 6 |
| 609 | Platform Steel Detail | 5-29-1926 | v | 6 |
| 610 | Detail of Equipment Rigging on Underframe | 6-10-1926 | v | 6 |
| 611 | Layout of Location of Equipment on Underframe | 6-7-1926 | v | 6 |
| 612 | Section at 8'2" Width | 6-12-1926 | v | 6 |
| 613 | Layout of Door Operating Equipment | 6-18-1926 | v | 6 |
| 614 | Door Engine Housing | 6-26-1926 | v | 6 |
| 615 | Assembly of Step & Engine Housing | 6-28-1926 | v | 6 |
| 616 | Reinforcing Plate over Doors | 7-5-1926 | v | 6 |
| 617 | Mounting Board & Cabinet for #1 End of Car | 7-8-1926 | v | 6 |
| 618 | Platform Equipment Layout #2 End | 7-1-1926 | v | 6 |
| 621 | Life Guard | 7-28-1926 | v | 6 |
| 624 | Skirt for Ends of Car | 8-5-1926 | v | 6 |
| 625 | Diagram of Clearances | 8-18-1926 | v | 6 |
| 626 | Brake Rods | 9-4-1926 | v | 6 |
| 627 | Pedals for Electric Registers | 9-22-1926 | v | 6 |
| 628 | Underframe of Nashville Cars | 5-29-1926 | v | 6 |
| - | Register Switch Floor Pedal | no date | dp | 6 |
| - | Bent Steel for Platforms | no date | v | 6 |
| - | Contactor Box Hanger | 8-9-1926 | qp | 6 |
| Nashville Railway & Light Company Drawing of Closed Car #503<br>(Dbl Trk, Deck Roof, Dbl End, Max. Trac. Trucks) | | 12-15-1925 | b | 1 |

## Drawings Specified for Evansville Cars

| | | | | |
|---|---|---|---|---|
| 701 | 8'6" x 37'6" Car S.E. for Evansville | 2-12-1926 | v | 3 |
| 703 | Plywood for 7 D.E. Evansville Cars | 4-3-1926 | v | 6 |
| 704 | Plywood for 6 S.E. Evansville Cars | 4-3-1926 | v | 6 |
| 705 | Underframe of Evansville Car | 6-23-1926 | v | 6 |
| 706 | Frame Extension of 6 S.E. Cars | 7-1-1926 | v | 6 |
| 707 | Details of Step with Door Operating Treadle | 7-16-1926 | v | 6 |
| 708 | Post Socket for Motorman's Curtain Guard<br>[Date ?] | 3-25-1925 | v | 6 |
| 709 | Brake Rods | 9-3-1926 | v | 6 |
| 710 | Section of Smoking Compartment | 9-7-1926 | v | 6 |
| 711 | Air Piping Diagram | 9-21-1926 | v | 6 |
| - | Skirt Division | 8-23-1926 | v | 6 |
| - | [Light] Wiring Diagram<br>[damaged] | no date | dp | 6 |
| - | Evansville Treadle Steps | no date | v | 6 |
| Southern Indiana Gas & Electric Company Drawing<br>[Wiring Diagram for Door Operation with Safety Interlocks] | | no date | v | 6 |

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Chicago, St.Paul, Minneapolis & Omaha Railway
8" x 10" Blueprints
Located in Tube 1

| | | | |
|---|---|---|---|
| 678 | Driver Brake Hanger Lever | Class I-1 and K-1 | 4-24-1912 |
| 678-1 | same title | Class I-2 (371-375) | 3-18-1905 |

| | | | |
|---|---|---|---|
| 678-2 | same title | Class I-2 (371-387)<br>and K-2 (388-389) | 3-20-1905 |
| 678-5 | Driver Brake Hanger Lever | Class G-3 | 1-29-1912 |
| 678-6 | same title | Class G-3 | 2-13-1912 |
| 678-7 | same title | Class F-6 | 8-30-1912 |
| 678-32 | Driver Brake Hanger Lever & Bushings | Class J-A | 3-22-1937 |
| 693-3 | Cylinder Levers & Bushings | Class J and J-A | 2-24-1914 |
| 695-3 | Driver Brake Shaft & Collar | Class J and J-A | 2-27-1914 |
| 703-31 | Trailer Brake Beam | Class E (508-509) | 5-3-1929 |
| 703-33 | Second Brake Beam & Bushing | Class J-A | 3-19-1937 |
| 703-34 | Third Brake Beam & Bushing | Class J-A | 3-20-1937 |

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MINNESOTA HISTORICAL SOCIETY

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# TWIN CITY RAPID TRANSIT COMPANY:

## An inventory of Its Corporate Records at the Minnesota Historical Society

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## OVERVIEW OF THE COLLECTION

**Creator:** Twin City Rapid Transit Company.

**Title:** Corporate records.

**Date:** 1872-2001 (bulk 1890-1965).

**Abstract:** Records of the company (and its subsidiaries and successors) that operated the streetcar and local bus system in the Minneapolis-St. Paul metropolitan area from 1891 until 1970.

**Quantity:** 43.2 cu. ft. (60 boxes).

**Location:** See Detailed Description section for shelf locations.

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## HISTORY OF THE TWIN CITY RAPID TRANSIT COMPANY

Twin City Rapid Transit Company (TCRT) operated the streetcar and local bus common carrier system in the Minneapolis-St. Paul metropolitan area from the 1890s until 1970. For many years the TCRT corporate umbrella included four operating subsidiaries which functioned as a unified transportation system: Minneapolis Street Railway Company, the St. Paul City Railway Company, Minneapolis & St. Paul Suburban Railroad Company, and the Twin City Motor Bus Company. Other TCRT subsidiaries included the Minnetonka and White Bear Navigation Company, Rapid Transit Real Estate Corporation, and the Transit Supply Company. The Minneapolis Street Railway Company (MSR) and the St. Paul City Railway Company (SPCR) began continuous service in the 1870s as horsecar carriers. In 1886 the two properties began to operate under a single group of owners when Minneapolis businessman Thomas Lowry and his associates gained control of both. Electrification of the horsecar lines began in

Minneapolis in 1889 and in St. Paul in 1890.

The Twin City Rapid Transit Company (a New Jersey corporation) was incorporated in 1891 as a holding company, with the MSR and the SPCR as wholly-owned operating subsidiaries. The TCRT was succeeded in 1939 by a new Minnesota corporation of the same name. A management change in 1949 brought New York financier Charles Green to the presidency of the Twin City Rapid Transit Company. Green and his associates decided to abandon the streetcar lines and convert to buses as quickly as possible, apparently in order to maximize their short-term profit. The company's entire streetcar fleet was scrapped and replaced by buses in an aggressive conversion plan completed in 1954 under TCRT president Fred A. Ossanna, a former associate of Green's who managed to oust him in 1951. Ossanna and four of his associates were convicted in 1960 of defrauding the TCRT of company assets, including scrap metal and real estate, during the conversion. Twin City Rapid Transit Company changed its name in 1962 to Minnesota Enterprises Incorporated, and in 1970 this firm became MEI Corporation. MEI left the transit business in 1970 with the takeover of its Twin City Lines subsidiary by the Twin Cities Area Metropolitan Transit Commission, an agency created by the Minnesota Legislature and charged with maintaining and improving public mass transit in the Twin Cities metropolitan area.

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## SCOPE AND CONTENTS OF THE COLLECTION

The collection consists of records of the Twin City Rapid Transit Company and its subsidiaries and their predecessors. A small amount of material (mainly annual reports) relates to successor companies Minnesota Enterprises Incorporated and MEI Corporation. Most of the records document the affairs of three operating subsidiaries: Minneapolis Street Railway Company, the St. Paul City Railway Company, and the Minneapolis & St. Paul Suburban Railroad Company.

Most of the material is of a financial nature, including valuation records and comptroller's files. There are also stock certificate books, annual reports, employment records, right-of-way and trackage maps, some real estate records, mechanical and architectural drawings, and assorted subject files. The collection includes minute books for related and subsidiary companies, while the only minute books for the TCRT itself date from 1954 to 1959 and are in the form of shorthand notes in 6 spiral-bound stenographer's notebooks.

Valuation records consist primarily of bound valuation reports (1920s), subsequent valuation record additions (1925-1961) (also bound), and a set of paper files. Comptroller's files include information about bus purchases, PCC streetcars, municipal ordinances and resolutions affecting the operating subsidiaries, the St. Anthony Falls Water Power Company, taxes, and fare increases. Comptroller's files also include annual reports to government agencies, retirement plan-pension trust records, copies of the Minneapolis Horse Railroad Company's articles of incorporation, and documents related to TCRT's planned 1944 trust bond offering.

Employment records include Employee Appointment Cards, which give the employee's name and address, badge number, date employed, last date in service, and other information. An extensive set of mechanical and architectural drawings depict TCRT streetcars, company-owned boats that once plied the waters of Lake Minnetonka, car stations, shops, and other TCRT facilities.

There is information about TCRT operations; payrolls; the construction and maintenance of streetcar lines; bus purchases; and the company's scrapping and burning of its streetcars in the 1950s.

Some records relate to other companies that apparently had some connection to the TCRT or to its officers, including the Duluth-Superior Traction Company and the Minneapolis Anoka and Cuyuna Range Railway Company. Miscellaneous Records include a file of historical information about the TCRT, some Duluth-Superior Traction Company annual reports, and a folder of news clippings relating to the streetcar-to-bus conversion scandal.

Most of the collection came to the Minnesota Historical Society in 1993 from the Minnesota Transportation Museum, one of whose members (Russell L. Olson) once worked for TCRT. Olson apparently had possession of and worked with the materials constituting the large 1993 accession (14,978) while writing a book. Other pieces of the collection as presently constituted include a small, previously-cataloged manuscript collection (formerly P652) and materials brought together from State Archives record series and from other sources.

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## ORGANIZATION OF THE COLLECTION

These documents are organized into the following sections:

Corporation Records

Claim Department Records
Comptroller's Officer Records
Construction Records
Employment Records
Engineering Records
Mechanical Department Records
Operating Records
Valuation Department Records
Miscellaneous Records

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## RELATED MATERIALS

Additional information about the Twin City Rapid Transit Company can be found in other Minnesota Historical Society collections. A nearly complete set of annual reports is found in the MHS serials collection. Some collective labor agreements, rule books, time tables, promotional literature, and other printed items are also located in the book collection, as is a 1951 article from *Collier's* magazine that describes mob infiltration and control of the TCRT "How Mobsters Grabbed a City's Transit Line". There is also information in the Library's Vertical File under the headings Transportation: Street Railways, Transportation: Transit Lines, Blumenfeld, and Ossanna.

Some original TCRT documents are found in the Russell L. Olson Papers in the MHS manuscript collections, and in several series of Metropolitan Transit Commission records in the Minnesota State Archives.

There are no photographs in this collection. Several hundred photographic negatives were received from the Minnesota Transportation Museum and were subsequently transferred to the MHS sound and visual collections. A 1953 audio recording of what is said to be the Twin Cities' last TCRT-operated trolley streetcar is also in the MHS sound and visual collections.

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## INDEX TERMS

*This collection is indexed under the following headings in the catalog of the Minnesota Historical Society. Researchers desiring materials about related topics, persons or places should search the catalog using these headings.*

**Topics:**

Architectural drawings.
Bus lines--Minnesota--Twin Cities Metropolitan Area.
Electric railroads--Minnesota.
Horse railroads--Minnesota.
Local transit--Twin Cities Metropolitan Area--Finance.
Pensions--Minnesota.
Street-railroads--Minnesota--Minneapolis.
Street-railroads--Minnesota--Saint Paul.
Trolley cars--Minnesota.
Twin Cities Metropolitan Area (Minn.)--Local transit.

**Organization:**

Duluth-Superior Traction Company.
MEI Corporation.
Minneapolis Anoka and Cuyuna Range Railway Company.
Minneapolis & St. Paul Suburban Railroad Company.
Minnesota Enterprises Incorporated.
Minnetonka and White Bear Navigation Company.
Rapid Transit Real Estate Corporation.
St. Paul Railway Company (Minn.).
Transit Supply Company.
Twin City Motor Bus Company.
Twin City Lines (Minn.).

**Genre:**

Payrolls.
Architectural drawings.
Maps.
Mechanical drawings.

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## ADMINISTRATIVE INFORMATION

### Preferred Citation:

*[Indicate the cited item and/or series here].* Twin City Rapid Transit Company Records. Minnesota Historical Society.

*See the Chicago Manual of Style for additional examples.*

### Accession Information:

Accession number: 10,883; 14,784; 14,978; 14,979; 14,980; 15,932; 985-31; 985-193

### Processing Information:

Processed by: David B. Peterson, December 1994; additions by David B. Peterson, January 2003

PALS ID number: 09-00040240

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## DETAILED DESCRIPTION OF THE COLLECTION

*Note to Researchers: To request materials, please note both the location and box numbers shown below.*

### Corporation Records

| Location | Box | |
|---|---|---|
| 142.F.9.8F | 1 | **Twin City Rapid Transit Company:** |

*Articles of Incorporation, By-Laws, Legislative Acts, Ordinances, Resolutions, and Agreements* (Twin City Rapid Transit Company and Subsidiary Companies), January 1915. 1 volume.

Companies represented in the volume include Twin City Rapid Transit Company; Minneapolis Street Railway Company; St. Paul Street Railway Company; Minneapolis & St. Paul Suburban Railroad Company; Minneapolis & St. Paul Suburban Railway Company; Minneapolis, Lyndale & Minnetonka Railway Company; Transit Supply Company; Minnetonka & White Bear Navigation Company; and Rapid Transit Real Estate Corporation.

Annual reports:

1899, 1903, 1916, 1920, 1925, 1927-1928.

1931-1948. 2 folders.

1950-1969. 2 folders.

Note: Reports are for TCRT through 1961; Minnesota Enterprises, 1962-1968; MEI Corporation, 1969.

Board of Directors minutes (in shorthand), 1954-1959. 6 spiral stenographers' notebooks.

Bylaws, 1963.

Stock certificates, 1952-1960.

Journal, 1904-1906.1 volume.

Includes: Minneapolis Street Railway Company (p. 1-91), St. Paul City Railway Company (p. 217-277), and Minneapolis and St. Paul Suburban Railway Company (p. 327-365).

Note to researchers: Volume was severely water damaged; covers and blank pages were removed and discarded.

Consolidated journal, 1946-1949.1 volume.

Payroll record book, 1943-1944.1 volume.

Gives amount of compensation to TCRT officers and directors from various accounts: TCRT, Minneapolis Street Railway Co., St. Paul City Railway Co., Minneapolis & St. Paul Suburban Railroad Co., and Twin City Motor Bus Co.

| Location | Box | |
|---|---|---|
| 142.G.3.2F-1 | 2 | **Related and subsidiary companies:** |

Como Railway Company: Minute book, 1880-1882.

Minneapolis, Lyndale and Minnetonka Railway Company:

Minute books:

1878-1888.

Begins as Lyndale Railway Company.

1889-1929.

Stock journal, 1881-1898.

Stock ledger, 1881-1909.

| Location | Box | |
|---|---|---|
| 142.G.3.2F-2 | 3 | Minneapolis and St. Paul Suburban Railway Company: |

Minute books:

1899-1920.

1921-1929.

Stock certificate book, 1899-1916.

Minneapolis & St. Paul Suburban Railroad Company:

Minute book, 1910-1958.

| Location | Box |
|---|---|

| | | |
|---|---|---|
| 142.F.10.1B | 4 | Minneapolis Street Railway Company:<br>Minute books:<br>1873-1884.<br>"Original Minute Book."<br>1873-1959. 4 volumes.<br>Stock certificate book, 1888-1904.<br>Mostly blank; contains capital stock shares 501-1000. |

| Location | Box | |
|---|---|---|
| 142.F.10.2F | 5 | Minnetonka and White Bear Navigation Company:<br>Corporate record book, 1910-1958.<br>Journal, 1946-1961.<br>Rapid Transit Real Estate Corporation:<br>Corporate record book, 1910-1958.<br>Journal, 1946-1961. |

| Location | Box | |
|---|---|---|
| 142.F.10.3B | 6 | St. Paul City Railway Company:<br>Minute books:<br>1872-1927. 4 volumes.<br>Early minutes are from the St. Paul Street Railway Company, predecessor of the St. Paul City Railway Company.<br>1956-1959.<br>Saint Paul and Suburban Railway Company. Minute book, 1896-1902. |

| Location | Box | |
|---|---|---|
| 142.G.3.3B-1 | 7 | Transit Supply Company Ledger, 1946-1950. |

| Location | Box | |
|---|---|---|
| 142.G.3.3B-2 | 8 | Twin City Motor Bus Company:<br>Minute book, 1937-1959.<br>Journal, 1946-1950. |

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## Claim Department Records

| Location | Box | |
|---|---|---|
| 142.G.3.4F-1 | 9 | **Claim Department disbursement record books:** |

Minneapolis Street Railway Company, 1953-1955.

Twin City Motor Bus Company, May 1952-May 1955.

| Location | Box | |
|---|---|---|
| 142.G.3.4F-2 | 10 | **Claim Record of Employees Injured ("Workmen's Comp. Register"):** |

Minneapolis Street Railway Company, Dec. 24, 1954-Dec. 31, 1960.

M claim numbers; include St. Paul City Ry. Co. claims [E claim numbers], Jan. 10, 1957-Dec. 22, 1960, beginning on page 30.

St. Paul City Railway Company, April 1951-Jan. 1957.

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## Comptroller's Office

| Location | Box | |
|---|---|---|
| 143.F.9.6F | 11 | **Numerically-coded subject files:** |

Mainly comptroller but probably not exclusive to that office. Some documents say "executive office."

127.1-I. Retirement plan: 1955 licenses, 1954-1955.

128.2-N. Minneapolis Street Railway Company bus licenses, 1954-1957.

Includes bus roster and license record as of Feb. 1, 1957; also includes cars and trucks; Minneapolis and St. Paul companies.

Bus specifications and brochures:

129.6. Undated and 1935-1940. 2 folders.

129.7. 1946.

Bus purchases, etc.:

Includes correspondence, purchase orders, invoices, contracts, and agreements.

    - 129.16. 1951-1958.
    - 129.16-O. 1960-1964.
    - 129.16-P. 1964-1965.
    - 129.16-Q. 1964-1965.

131. Examination report: General form, 1925.

154. PCC streetcars, 1945-1946.

    President's Conference Committee streetcars--streamlined, single-end cars, which grew out of experiments in the 1930s sponsored by a group of street railway company presidents; arrived on TCRT system in 1946-1947.

167. Minneapolis Horse Railroad Company: Articles of incorporation (1867), 1908. 2 transcriptions.

174. Duluth Street Railway Co. and Duluth-Superior Traction Co., 1900-1929.

175. Lyndale Railway Company, 1878-1899.

235. Drawing: Como Avenue and Eustis Street bus turnaround property, 1960.

Minneapolis Street Railway Company:

- 245-1. Ordinances and resolutions, 1873-1912.
- 245-2. Ordinances, 1876-1891.
- 245-3. Resolutions, 1890-1893.
- 245-4. Resolutions and ordinances, 1904-1923.
- 245-5. Resolutions and ordinances, 1919-1923.

St. Paul City Railway Company:

- 247. Ordinances and resolutions, 1872-1889.
- 247-1. Ordinances and resolutions, 1891-1905.
- 247-2. Ordinances and resolutions, 1906-1914.
- 247-3. Ordinances and resolutions, 1916-1925.

248. Phalen Park Ordinances, 1905-1930.

Minneapolis and St. Paul Suburban Railway Co. ordinances and resolutions:

- 251. City of Stillwater, 1899-1932.

- 252. Mahtomedi/North and South Stillwater, 1903-1905, 1954.
- 253. New Canada/White Bear, 1904.
- 254. South St. Paul, 1905-1928.
- 255. Excelsior, 1905-1906.
- 255-1. Excelsior, 1908-1922.
- 256. St. Louis Park, 1891-1916.
- 257. West Minneapolis, 1898-1907.
- 258. North Side Street Railway Company, 1890-1913, 1941.
- 259. Edina, 1914-1928.
- 260. Columbia Heights, 1906, 1933-1934.
- 261. Sec. 35-117-23 (Hennepin County), 1916.

262. Minnetonka and White Bear Navigation Company: Ordinances and resolutions, 1915.

279. Crossing permits: Great Northern Railway Company, 1891-1941.

| Location | Box | |
|---|---|---|
| 143.F.9.7B | 12 | 281. Crossing points: Minneapolis & St. Louis Railway Company, 1887-1908. |

282. Crossing permits: Wisconsin Central Railway Company, 1890-1935.

285. Fort Snelling Reservation, 1905-1940.

286. Minnesota Railroad and Warehouse Commission, 1915-1933.

St. Anthony Falls Water Power Company:

- 301. 1894-1901.
- 302. Contracts, etc., 1896-1901.
- 303. Contracts, leases, etc., 1893-1909.
- 304. Lower Dam: Leases, agreements, etc., 1896-1915.
- 304.1. Lower Dam leases, contracts, etc., 1909-1948.
- 306. Minneapolis Mill Co. and Minnepolis General Electric Co., 1907-1917.
- 307. Permits, grants, etc., 1911-1947.
- 308. 1937-1947.

310.1-G. Application for self-insurance permit, 1955.

321-W. State of Minnesota Annual Information Return (1955), [1956?].

324. Fuel purchasers' and distributors' licenses, 1953-1954.

329.1-H. Annual Report of Domestic Corporations to State of South Dakota, 1955.

Minneapolis Power Station:

335. Equipment specifications, 1940.

Sargent & Lundy.

336. Turbine generators, 1944.

General Electric.

346.2-C. MSRC application to Minneapolis Park Board for auto transportation permit, 1955.

350.2-C. Quarterly reports to Securities and Exchange Commission, 1955.

Forms R-2 and R-3.

356. Minneapolis Power House: Steam generating boiler, 1949.

Babcock & Wilcox.

360. Mercury arc rectifier equipment specifications, 1946.

General Electric.

| Location | Box | |
|---|---|---|
| 143.F.9.8F | 13 | 369-A. TCRT financing documents, 1944. |

Vol. 1: Documents 7-54. Relates to TCRT's planned offering of $7,000,000 in 4% collateral trust bonds due Oct. 1, 1964; contains historical and background information about TCRT and its subsidiaries.

396. Trade name: Certificates under name of Twin City Coach Lines, 1954-1970.

400.1. Employer's Quarterly Federal Tax Return (Form 941), 1955-1956.

401.1. Minnesota Department of Employment Security, 1955.

402.1. Quarterly federal excise taxes, 1955.

403.13. Gasoline tax refund: State of Minnesota, 1955.

866. Accounting, rulings, classification of accounts, 1949-1952, 1959.

**Comptroller's files (unnumbered):**

Assessment report (TCRT), 1900.

Balance sheets and proposed journal entries in connection with liquidation of subsidiary companies, 1957-1961.

Certain financial transactions in the history of the TCRT, its subsidiaries, and predecessors, 1943.

Comptroller's procedures, memoranda, and bulletins, 1948-1950.

Consolidated earned surplus data and dividends paid reports and worksheets, 1944-1962.

Correspondnece, 1953-1964.

Form 10-K, 1956.

Legal instruments concerning establishment of rate fares:

- Before district courts in Hennepin and Ramsey counties, 1952-1959. 3 folders.

  Copies of pleadings, including briefs, hearing transcripts, and other legal papers. Includes documents marked 9-8 (3) E, 9-9 (3) B, 508-9 [a valuation file number], and "executive office."

- Before Railroad and Warehouse Commission, 1921-1925, 1932-1953. 2 folders.

  Copies of valuation findings, fare orders, and other legal papers. Includes documents marked 298 [a comptroller's file number?], 9.8, 9.9, and "executive office."

| **Location** | **Box** | |
|---|---|---|
| 143.F.9.9B | 14 | Legal instruments: |

- Before Railroad and Warehouse Commission, 1954-1963. 5 folders.

Retirement plan and pension trust records:

- Actuarial valuation reports, 1951-1969. 3 folders.
- Agreements between company and individual employees, 1944-1956.
- Annual reports, 1951, 1958, 1964.

Correspondence, 1944-1965.

Includes documents marked 127 [comptroller's file] and 925 [president's file].

Financial statements, spreadsheets, and related papers, 1943-1965.

Pension trust agreements, 1934-1961. 2 folders.

Documents marked 127 [comptroller's file].

St. Paul City Railway Company: Annual Report to Railroad and Warehouse Commission, 1955.

Transportation tax data, 1955-1959.

Includes financial statements, reports, and correspondence.

Trust bonds prospectus, 1944-1945.

Contains historical and background information about TCRT and its subsidiaries.

Value of properties report, 1916.

Report to Minneapolis City Council on analysis and review of value of the properties of the Minneapolis Street Railway Company by consulting engineer Charles L. Pillsbury.

Miscellaneous financial reports, 1925-1969. 2 folders.

Includes examination reports, summaries and reviews, spreadsheets, and other financial reports and information.

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## Construction Records

| Location | Box | |
|---|---|---|
| 142.G.3.5B-1 | 15 | **Construction journals:** |

Documents purchases of tools, expenditures for labor and materials in connection with track construction and reconstruction, repairs to and refurbishment/reconstruction of streetcars, and transactions involving power plants, buildings and fixtures, real estate, etc.

1901-Sept. 1907.

| Location | Box | |
|---|---|---|
| 142.G.3.5B-2 | 16 | Oct. 1907-1910. |

| Location | Box | |
|---|---|---|
| 142.G.3.6F-1 | 17 | 1911-1912. 2 volumes. |

Begin Transit Supply Company.

1914.

| Location | Box | |
|---|---|---|
| 142.G.3.6F-2 | 18 | 1915-1917. 3 volumes. |

| Location | Box | |
|---|---|---|
| 142.G.3.7B-1 | 19 | 1918-1919. 2 volumes. |

| Location | Box | |
|---|---|---|
| 142.G.3.7B-2 | 20 | 1920-1922. 3 volumes. |

| Location | Box | |
|---|---|---|
| 142.G.3.8F-1 | 21 | 1923-1924. 2 volumes. |

**Construction ledgers:**

Documents work done along certain streets and intersections, track construction and reconstruction, expenses at TCRT buildings and shops, purchase of tools and equipment, repairs to and maintenance of streetcars, ferryboat and steamer expenses, purchases of and modifications and repairs to buses (1927), real estate expenses, etc.

| Location | Box | |
|---|---|---|
| 142.G.3.8F-2 | 22 | 1901-1910. |

Includes ferry/steamboats and Duluth-Superior Traction Company.

| Location | Box | |
|---|---|---|
| 142.G.4.1B-1 | 23 | 1927. |

Transit Supply Company.

**Real estate deed record books:**

1880-1924.

Includes Minneapolis Street Railway Company, 1880-1923; St. Paul City Railway Company, 1882-1924; Minneapolis & St. Paul Suburban Railway Company, 1881-1924.

1906-1927.

Includes Minneapolis & St. Paul Suburban Railway Company, 1906-1927; Minnetonka and White Bear Navigation Company, 1910-1913; Twin City Motor Bus Company, 1921-1927; Rapid Transit Real Estate Corporation, 1912-1923.

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## Employment Records

| Location | Box | |
|---|---|---|
| 143.F.9.10F | 24 | **Appointment and seniority record books:** |

Appointment record books ("Gray Books"), 1914-1925. 8 volumes.

The volumes apparently pertain only to motormen, conductors, and bus drivers. They include individual's name, appointment number, date, [home] station, position, and badge number.

Seniority record books, April 1, 1923-1954. 2 volumes.

Apparently pertain only to motormen, conductors, and bus drivers. They seem to be a record of discharges, resignations, retirements, transfers, leaves of absence granted, layoffs, vacation granted, sick leaves, etc.; organized numerically by badge number[?].

Station seniority record or line standing, 1943-1954.

Pertains to women operators and conductors, and gives individual's name, appointment date, appointment number, badge number, and final disposition.

| Location | Box | |
|---|---|---|
| 142.E.5.7B-1 | 25 | **Employee appointment cards:**<br>Arranged by employee surname; format and information varies. Most give employee's name and address, badge number, appointment number, date employed, D. F. number, reason for leaving, last date in service, and station foreman's comments. Some also give employee's date of birth, whether married or single, etc. The cards within each letter of the alphabet are typically found in two or more alphabetical batches, the reason for which is not readily apparent.<br>Surnames A-B. |
| 142.E.5.7B-2 | 26 | Surnames C-E. |
| 142.E.5.8F-1 | 27 | Surnames F-Ha. |
| 142.E.5.8F-2 | 28 | Surnames He-J. |
| 142.E.6.1B-1. | 29 | Surnames K-L. |
| 142.E.6.1B-2 | 30 | Surnames M-N. |
| 142.E.6.2F-1 | 59 | Surnames O-Rn. |
| 142.E.6.2F-2 | 60 | Surnames Ro-S. |
| 142.G.4.1B-2 | 31 | Surnames T-Z. |

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## Engineering Records

| Location | Box | |
|---|---|---|
| 142.E.6.5 | 32 | **Right-of-way and track maps:** |

**Lake Minnetonka Division:**

Deephaven Line, Feb. 20, 1912.

Deephaven Jct. to Deephaven. Volume says: "Leased from C.M. & St. P. Ry. Co."

Excelsior to Tonka Bay, Jan. 1909.

Harriet Loop to Minneapolis city limits, April 14, 1909.

Hopkins to Excelsior, March 1906.2 maps.

Minnetonka Line blueprints, 1918:

- 112-6053. Station 301+70.1 to 407+00.
- 112-6054. Station 407+00 to 505+50.
- 112-6055. Station 505+50 to 572+50.7.
- 112-6056. Station 572+50.7 to 678+00.
- 112-6057. Station 678+00 to 780+00.
- 112-6058. Station 780+00 to 875+00.
- 112-6059. Station 875+00 to 975+00.

Plat of auditor's subdivision no. 120, Hennepin County, undated.

"Excelsior Park, etc."

Plat showing government field notes within the limits of the city of Minneapolis, undated/untitled plat map of Lake Minnetonka area, undated.

These are two connected maps.

Tonka Bay Extension: Manitou Jct. to Tonka Bay and Lake Minnetonka, May 1909.

| Location | Box | |
|---|---|---|
| 142.J.5.1 | 34 | **Minneapolis, Anoka and Cuyuna Range Railway Company:** |

Location map of Minneapolis & Northern Railway: Minneapolis to Anoka, 1912.

| Location | Box | |
|---|---|---|
| 142.E.6.5 | 32 | Right-of-way and track maps, Minneapolis to Anoka, 1929. 4 |

maps.

Property, lines, and connections in the city of Anoka, 1929.

[2 unidentified and undated tracings]

**Motor Line:**

Motor Line at Hopkins, undated.

Sheet no. 668.

Washburn Park, Minneapolis, 1886.

"Comprising Parts of S15-T28N-R24W"; North side of Minnehaha Creek from Lyndale Avenue to Third Ave. So.; modern photocopy.

| Location | Box |
|---|---|
| 142.E.6.6 | 33 |

**Stillwater Division:**

Mahtomedi branch blueprints, 1917.

105-6019. Station 487+52.9 to 569+53.9.

Plan of Minneapolis and St. Paul Suburban Railway from East 7th St. Station to Wildwood, Jan. 19, 1900.

Stillwater line blueprints, 1917. 8 maps.

White Bear line blueprints, 1918. 2 maps.

Wildwood blueline drawings:

Map showing the Minneapolis and St. Paul Suburban Railway in Ramsey and Washington counties, 1912.

Topographical map of Wildwood showing the physical properties of the Minneapolis and St. Paul Suburban Railway Company, 1918.

Wildwood blueprints:

Buildings at Wildwood, [Oct. 1926?].

Plat map.

Wildwood Manor, undated.

Plat map showing path to Wildwood Station; American Cities Company, St. Paul.

**Miscellaneous blueprint maps:**

Chicago Great Western Railway Co. Klondike Spur, South St. Paul, undated.

Vicinity of Concord Street/Grand and Marie avenues/Stockyards Exchange Building.

Fort Snelling right-of-way:

"Military Reserve, Fort Snelling, Minn., 1906," [ca. 1915].

Map of Fort Snelling Extension: Minneapolis Street Railway, 1905.

Inter-Campus right-of-way, 1914.

"University of Minnesota Location and Right of Way Map of University Trolley Line from University Farm to Belt Line Railway & Como Harriet Electric Line.

Plan of TCRT property showing location of the proposed power house and proposed spur track to house, 10th Ave. S.E. near river, Minneapolis, 1902.

Proposed addition to Nicollet bus garage, 1947.

Mechanical Department map/drawing #17D6474.

Proposed loop at Washington, Lyndale, and 42nd avenues north, Minneapolis, 1914.

Tracks and property at West Como Avenue Sand Pit, St. Paul, 1914.

**Miscellaneous oversize materials**, 2001.

Includes a mass-produced artist's rendition of the Snelling Avenue Garage (1907-2001) and its replacement, the East Metro Transit Facility (bus garage). This poster was made available to the public at the time of the inauguration of the new facility in 2001.

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## Mechanical Department

**Location** **Box**

142.E.6.7 35 **Mechanical and architectural drawings:**

**A/B/C/D-size drawings:**

Item list prepared by Russell L. Olson of the Minnesota Transportation Museum. Detailed list giving series numbers, drawing numbers, sizes, dates, and physical type (drafting vellum, white print, blue print, drafting paper) of drawings listed below. Olson's list (rearranged somewhat by the cataloger) is in a ring binder and is intended to be used in conjunction with this series list.

Single truck passenger cars, 1888-1896.

Standard double-truck cars, 1898-1900.

Early tracings, 1891-1904.

Car elevations, 1902-1908.

Series 10: Axles (B), 1908-1910.

Series 11: Minneapolis office and substation, 1903-1912, 1923-1934.

Series 15: St. Paul office and substation, 1903, 1930.

Series 15: Boats (C), 1906-1908.

See Box 38 for "E" size drawings.

Series 17: Snelling bus shop (B), 1942-1946.

Series 18: Car stations and shops:

Snelling station (-/C), 1905-1909, 1930-1933.

Snelling shops (C/D), 1912, 1929-1933.

Snelling shops boiler room (B/C/D), 1929-1950.

East Side station (Minneapolis) (C), 1932-1933.

Nicollet station (C), 1932-1934.

Lake Street station (C/D), 1910, 1933.

North Side station (C), 1933.

South St. Paul station (D), 1919.

11th Street office and substation (Minneapolis) (C/D), 1927-1934.

Power stations/substations, 1905-

1914, 1929-1940s.

Series 19: Snelling shops boiler room (B/C/D), 1923-1934.

Series 20: Gongs, bells, horns, whistles (B), 1909, 1927-1931.

Series 21: Air brake piping (A/B/C/D), 1910-1944.

| Location | Box | |
|---|---|---|
| 142.E.6.8 | 36 | Series 23: Truck brake arrangements (D), 1908-1921.<br>Series 24: Brake arrangements (B/C/D), 1908-1912, 1931-1935.<br>Series 25: Hand brakes and rigging (B/C), 1926-1943.<br>Series 27: Truck assemblies (-/B/C/D), 1904-1928.<br>Series 30: Electrical equipment (A/B/C), 1908-1909, 1930-1933.<br>Series 31: Controllers (A/C), 1908, 1939.<br>Series 35: Car elevations (C/D), 1908-1932.<br>SEE: box 39 for "E" size drawings.<br>Series 36: Car details (A/B/C/D), 1905-1950.<br>Series 37: Underframe details (B/C/D), 1903-1905, 1925-1947.<br>SEE: box 40 for "E" size drawings.<br>Series 38: Attachments (C/D), 1909-1911.<br>Series 39: Work car elevations and underframes (A/B/C/D), 1905-1943.<br>SEE: box 41 for "E" size drawings. |

| Location | Box | |
|---|---|---|
| 142.E.7.1 | 37 | Series 42: Drawbars and couplers (B/C), 1910-1923.<br>Series 45: Fenders, pilots, scrapers (C/D), 1906-1928.<br>Series 48: Gates, doors, steps (A/B/C/D), 1903-1950.<br>Series 50: Tail lights and classification lights (B/C), 1908-1909, 1936.<br>Series 55: Heating systems (B/C/D), 1914-1950. |

AVERY® PV119E

Series 60: Motors (B/C), 1914, 1938-1950.

Series 62: Motor details (B), 1938-1949.

Series 70: Fare boxes, registers, and stands (A/B/C), 1910-1951.

Series 74: [Miscellaneous office equipment details] (C), 1930.

Series 75: Destination signs (A/B/C), 1909-1948.

Series 76: Springs (B), 1937.

Series 78: Trolley bus (C/D/E), 1922-1939.

Series 79: [Transmission stand for bus garage] (C), 1939.

Series 85: Trolley bases (B/C), 1909-1945.

Series 86: [Miscellaneous details] (B/C/D), 1921-1948.

Series 90: Wiring diagrams (B/C), 1908-1912, 1927-1945.

Series 95: Wheels (B), 1924, 1940-1947.

Series 96: Rails (B), 1934-1951.

Series 99: Miscellaneous (A/B/C/D), 1910-1912, 1930-1945.

Series D12: Lightweight noiseless truck (B/C/D), 1924-1930.

Lightweight noiseless electric street car company, 1924-1926.

Unclassified, 1930-1944.

Structures, 1906.

Hopkins viaducts and Selby tunnel. One is marked "Doc. File 279-J," a Comptroller's office file number[?].

Duluth Street Railway, 1928-1929.

| Location | Box |
|---|---|
| 142.J.5.2 | 38 |

**E-size drawings:**

Series 15: Boats (E), 1914-1917.

| Location | Box |
|---|---|
| 142.J.5.3 | 39 |

Series 35: Car elevations (E), 1909-1914.

| Location | Box |
|---|---|
| 142.J.5.4 | 40 |

Series 37: Underframe details (E), 1909.

| Location | Box |
|---|---|
| 142.J.5.5 | 41 |

Series 39: Work car elevations and

underframes (E), 1910-1916.

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## Operating Records

**Location** **Box**

143.F.10.1B 42 Organization and rules book, 1916.

Reports prepared by superintendent of schedules:

The reports give daily totals of cars, motormen, and conductors/buses and drivers by stations and lines.

Minneapolis and St. Paul car and crew statements:

1940-1941.

1944-1946. 3 volumes.

Bus and driver statements, 1943-1946. 2 volumes.

Rules and regulations of the Twin City Lines, 1950.

"Trainmen's & Bus Drivers' Guide."

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## Valuation Department

**Location** **Box**

142.G.4.2F-1 43 **Property valuation records:**

Index to track/overhead valuation records by street, 1925-1949.

An index to location of all property included by A. L. Drum in his set-up of the original cost and commission's valuation for the St. Paul, Minneapolis, and Suburban properties. Apparently indexes Valuation Record additions for 1925-1949.

**Location** **Box**

| Location | Box | |
|---|---|---|
| 143.F.10.2F | 44 | Valuation record additions:<br>Subsidiaries of TCRT:<br>1925-1927. 6 volumes. |
| 143.F.10.3B | 45 | 1928-1930 (Part I). 5 volumes. |
| 143.F.10.4F | 46 | 1930 (Part I); 1932 (Part I). 4 volumes. |
| 143.F.10.5B | 47 | 1932 (Part II) 1935. 7 volumes. |
| 143.F.10.6F | 48 | 1936-1938. 6 volumes. |
| 143.F.10.7B | 49 | 1939-1941. 6 volumes. |
| 143.F.10.8F | 50 | 1942-1945. 6 volumes. |
| 143.F.10.9B | 51 | 1946-1948. 6 volumes. |
| 143.F.10.10F | 52 | 1949. 2 volumes.<br>1955. ("Valuation Record: Subsidiaries")<br>1956-1961. ("TCRTCo. and Subsidiary Companies") |
| 143.F.11.1B | 53 | Minneapolis Street Railway Company:<br>Report on Value of Property as of Jan. 1, 1925 (A. L. Drum & Company, Consulting and Constructing Engineers, Chicago):<br>Vols. 1-8. 8 volumes. |
| 143.F.11.2F | 54 | Vols. 9-10B. 3 volumes.<br>Report on capital expenditures, Jan. 1916-Jan. 1919.<br>Bion J. Arnold, consulting engineer, Chicago.<br>Valuation record additions, 1950-1954. 5 reports.<br>Continued by "Valuation Record Additions: TCRTCo. and Subsidiary Companies," 1955-1961. SEE: box 52.<br>Minneapolis & St. Paul Suburban Railroad Company: |

Report on Value of Property as of Jan. 1, 1926 (A. L. Drum & Company):

Vol. I: Stillwater Division.

Vol. II: Minnetonka Division.

Vol. III: Suburban Local Lines.

Valuation record additions, 1942, 1950-1954. 6 reports.

Includes Minnetonka and White Bear Navigation Co., Twin City Motor Bus Co., and Rapid Transit Real Estate Corp. [1954 only]. See Box 52 for continuation.

**Location** **Box**

143.F.11.3B 55 St. Paul City Railway Company:

Report on Value of Property as of Jan. 1, 1925 (A. L. Drum & Co.):

Vols. 1-8B. 9 volumes.

**Location** **Box**

143.F.11.4F 56 Condensed Valuation Report, 1922 (A. L. Drum & Company).

Index to file record, [ca. 1922].

Pertains to Drum & Co. 1922 valuation.

Index to original cost and accountant records, [ca. 1922].

A. L. Drum & Company.

Statement by A. M. Robertson before the Minnesota Railroad and Warehouse Commission Regarding Valuation of the Property of the St. Paul City Railway Company, [ca. 1923?].

Gives history of establishment and growth of the system.

Valuation record additions, 1950-1951, 1953-1954. 4 reports.

SEE: Box 52 for continuation.

**Location** **Box**

143.F.11.5B 57 **Valuation files:**

Minneapolis Street Railway Company:

Comparison of drum and wilcox costs of track and paving (1900-1921), undated.

Condensed valuation report, 1922 (Drum & Co.).

Twin City Rapid Transit Company:

Blueprint file record, undated.

Condensed reports on St. Paul and Minneapolis properties (1900-1922), 1920-1923.

Inventory and appraisal, 1959-1960 (Merrill B. Knox and Associates, Chicago, Engineers and Consultants).

Twin City system: Index to Minneapolis files of A. L. Drum & Co. at 28 South Tenth Street, undated.

Valuation data, [ca. 1913?] (A. L. Drum & Co.).

Valuation of the property of the Minneapolis & St. Paul Suburban Railroad Company as of January 1, 1928.../1928 net property additions to the Minnetonka and White Bear Navigation Company/1928 net property additions to Twin City Motor Bus Company, 1928. (Vol. VI)

Valuation files list, 1955-1962.

List of numerically-coded files, some of which follow.

R-1. TCRT: Index to Drum & Co. 1914-1927 valuation records, 1949.

1-A. TCRT: Valuation file index, undated (A. L. Drum & Co.).

1-B. MSRC: Index to original cost and accountant records, [1920s?] (A. L. Drum & Co.).

9-2-a. TCRT: Detail of additions and betterments (1900-1914) (A. L. Drum & Co.).

9-5-A. TCRT: Tentative general balance sheets, Dec. 31, 1915 (A. L. Drum & Co.).

R-10. MSRC: Indexes to valuation records, 1920s.

R-273. Report on Twin City Rapid Transit Company by W. C. Gilman & Company, Engineers, 1944.

R-280. Land value: Summaries and plats, undated and 1915-1951.

3 folders.

"Land Value - Summaries and Plats of Mpls. St. Ry. Co. and St. Paul City Ry. Co. and Description of Lands as of 5/1/15."

508-9. Fare increase application, 1952-1953.

508-9. Fares: General, 1955-1956.

508-10. February 11, 1953 application fare, 1953-1954.

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## Miscellaneous Records

| Location | Box | |
|---|---|---|
| 143.F.11.6F | 58 | Duluth-Superior Traction Company: Annual reports, 1915, 1918, 1923, 1925-1929.<br>A more complete set is in the MHS serials collection.<br>Engineer's Office: St. Paul special work, 1906-1952.<br>Book of 8-1/2"x14" blueprint drawings documenting installation, replacement, and removal of switches, frogs, crossings, streetcar rails, and similar projects, especially in city streets and intersections. Cross-referenced to "C" and "E" files, which MHS did not have as of December 1994.<br>Four year plan of action, 1960.<br>Historical and background information, 1927.<br>Includes information about TCRT-owned steamboat "Minnehaha." SEE ALSO: TCRT Financing Documents in box 13, Trust Bond Prospectus in Box 14, and certain Valuation Department files for additional historical and background information.<br>Mechanical Department: Car data sheets:<br>Sketches and specifications for passenger cars and other equipment used by the TCRT. 4"x8" and 4- |

1/2"x8-1/2" drawings.

Undated.

Undated.

J. M. Tambornino, Electric Shop.

1930, 1949.

Formerly cataloged separately as P652.

1951.

H. P. Jacobson.

Minneapolis Street Railway Company v. City of Minneapolis: Correspondence, 1959-1960.

File #1894.

Organization report, 1964.

Twin City Lines, Inc., organization tables with narrative about various departments' functions.

Organization survey: Preliminary report, 1950.

Prepared for president Charles Green by private management firm of Booz, Allen & Hamilton. It concerns the preliminary cost reductions survey and recommendations on administrative organization structure and personnel.

Purchasing and stores procedures, 1963.

Sightseer excursions, 1907.

Streetcar-to-bus conversion scandal, 1950-1994.

Photocopies of items from MHS Reference Department Vertical File.

Superintendent of Power and Equipment: Correspondence, 1952-1954.

Much of this has to do with TCRT's burning of its streetcars as they were phased out and replaced by buses.

Twin City Lines insignia, undated. Oversize color photograph.

Two-car train booklet, 1921.

Cars 2002-2003.

Miscellany, 1917.

Includes a visitor's brochure entitled *The Twin Cities To-Day* containing route maps and photographs and narrative information about local attractions in Minneapolis and St. Paul, and in the Lake Minnetonka and White Bear Lake areas.

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MINNESOTA HISTORICAL SOCIETY
Manuscripts Collection Summary

Catalog No. ALPHA

**Name:** Olson, Russell L.

**Title:** Street railway research files,

**Dates:** 1881-1991.

**Quantity:** 2.0 cu. ft. (3 boxes).

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Summary: Research notes, background information, compilations of statistical and financial data, and other material pertaining to the Twin City Rapid Transit Company (TCRT) and to more than 25 other street railway systems in Minnesota and adjacent states.

Also includes maps, mechanical drawings, clippings, timetables, photographs, advertising literature, and some correspondence. There is information about company finances and operations; streetcars, horsecars, and other equipment; steamboats operated by the TCRT; a monorail system in South Saint Paul, Minnesota; buses; and streetcars in foreign countries.

Olson, a lifelong street-railroad enthusiast, apparently compiled this material in the course of his work on an article about the TCRT for Interurbans magazine (11:2; Dec. 1953) and a book about 021

Finding aids: An inventory that provides additional information about this collection is available in the repository; filed in ALPHA notebooks under the heading: Olson, Russell L.

Related materials: Olson's book Electric railways of Minnesota, and the issue of Interurbans magazine containing his article, are in the Minnesota Historical Society book collections.

Related materials: Corporate records of the Twin City Rapid Transit Company are in the Minnesota Historical Society manuscript collections.

Subject headings

Advertising.
Buses--Minnesota.
Electric railroads.
Grand Forks Street Railway Company (Grand Forks, N.D.).
Horse railroads.
La Crosse City Railway Company (La Crosse, Wis.).
Maps.
Mechanical drawings.
Monorail railroads--Minnesota--South Saint Paul.
Photographs.

## Subject headings (cont.)

Steamboats--Minnesota.
Street-railroads--Minnesota.
Street-railroads--North Dakota.
Street-railroads--Rolling stock.
Street-railroads--Timetables.
Street-railroads--Wisconsin.
Winona City Railway Company (Winona, Minnesota).

## Author entries

Central Warehouse Company (Saint Paul, Minnesota).
Duluth Street Railway Company.
Light Weight Noiseless Electric Street Car Company (Chicago, Ill.).
Mesaba Railway Co. (Virginia, Minnesota).
Minneapolis, Anoka and Cuyuna Range Railway Company.
Minneapolis, Northfield and Southern Railway Company.
Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Co.
Mississippi Valley Public Service Company.
Northern Car Company (Minneapolis, Minnesota).
St. Paul Southern Electric Railway Company.
Twin City Rapid Transit Company.
Twin City Lines (Minnesota).

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Acc. No(s): electric railways in Minnesota. Many
PALS ID No. 0900039943
Location(s): 143.F.11.7B-143.F.11.8F (2 boxes); 142.E.7.3 (dov) (1 box)

ALPHA Olson, Russell L.
Street railway research files, 1881-1991.
2.0 cu. ft. (3 boxes).

## HISTORICAL SKETCH

Russell L. Olson, a lifelong streetcar enthusiast, was born in Minneapolis in 1931. In the mid-1940s he worked during the summers for the Twin City Rapid Transit Company (TCRT), the firm that operated the streetcar and, later, the local bus system in the Minneapolis-St. Paul metropolitan area. He later worked for Pillsbury Mills. Olson and his family for many years made their home in the Minneapolis suburb of Bloomington.

Olson wrote the book *Electric Railways of Minnesota* (1976). He and Edwin H. Nelson co-authored the December, 1953 issue of *Interurbans* magazine ("Electric Railways of Minneapolis & St. Paul"), which was concerned with the Twin Cities Rapid Transit Company.

Olson was affiliated with the Minnesota Transportation Museum (MTM), which published his book.

David B. Peterson
January, 1995

8021
13,292
14,978
14,980

## DESCRIPTION OF THE RECORDS

The collection consists of research notes, background information, and compilations of statistical and financial data relating to the Twin City Rapid Transit Company and to more than 25 smaller street railway (horsecar and streetcar) systems located in small and medium sized cities in Minnesota, Wisconsin, and North and South Dakota. There is also information on two streetcar manufacturing firms. The files were compiled by Olson, apparently in the course of his work on the book and the *Interurban* magazine issue, both of which are in the Minnesota Historical Society book collection.

Olson's files include information about the history, finances, and operations of small and relatively obscure streetcar lines; streetcars, horsecars, and other equipment; buses; steamboats operated on Lake Minnetonka by the TCRT; a monorail system in South St. Paul; and streetcars in Europe, Canada, and Australia.

Much of the collection consists of Olson's typewritten notes and transcriptions made from TCRT records, published background and reference materials, and some short historical narratives. There are right-of-way and track maps, annotated topographic maps, and Sanborn fire insurance maps; clippings; employee and equipment rosters; and blueprint and blueline mechanical drawings. Original documents (and photocopies of original documents) are scattered throughout the collection, including car data sheets, timetables, product literature, advertisements, and some correspondence (1910s-1920s) between TCRT master mechanic W. J. Smith and general superintendent Donald Goodrich. There is also some of Olson's correspondence with archivists, librarians, and with other researchers; with officials of some of the street-railroad companies; and with other streetcar enthusiasts, including Clarence J. Vincent of Winona, Minnesota.

There are some photographs, including pictures of buses and an album of snapshot reproductions of older photographs taken along the TCRT Stillwater and Lake Minnetonka divisions (ca.1907-ca.1917).

The collection as presently constituted includes files previously cataloged as "Olson, Russell L., comp., 1943-1955 [Material Relating to Street Railways, ca.1872-1955]" (FHE4471.O52).

## CONTAINER LIST

**Box 1.** **143.F.11.7B**

### Twin City Rapid Transit Company

Accident Reports (Old), 1906-1907; Conductors' Car Records, 1916-1954.
Car Stations - Construction History. Trackage and Maps, undated and 1907-1916.
    (SEE ALSO: Box 3)
Construction: History of City Lines, undated.
*Electric Railways of Minneapolis & St. Paul*, 1953.
    (*Interurbans* magazine, Vol. 11, No. 2, December 1953)
Financial Data Notebook (1872-1951).
General History: Corporate Data, undated and 1911-1936.
Lake Minnetonka Division, undated.
Operations, Details of, 1952-1954. (2 folders)
Operations: Schedules, Sign Lists, and Information on Operations, undated and 1892-1916.
Photograph Album, undated and 1906-[195-].
    (These seem to be modern reproductions of older photographs taken along the Stillwater and Lake Minnetonka divisions: tracks, rights-of-way, power substations, Wildwood Park, etc.)
Power Houses: Electrical Generation and Distribution, undated and 1916-1954.
Roster of Equipment (1) [1872-1912], undated.
    (Includes: steam equipment, horsecars, cable cars, original electric passenger cars, original electric work cars.)
Roster of Equipment (2): Rolling Stock; Miscellaneous Details; undated and 1902-1925, 1954.
        (Includes master mechanic's correspondence and information about steamboats and double-deck streetcars; SEE ALSO: box 3)
Schedule Reports: Lake Street Station, 1950-1952.
    (SEE: box 3)
Stillwater Division, undated.
Streetcar Watcher's Notebook, 1942-1954. (2 folders)
    (Apparently includes accounts of some of Olson's experiences working on the TCRT.)
Track and Overhead Construction Details, undated.
Trackage Maps: City, undated and 1901-1938.
    (SEE ALSO: box 3.)
Twin City Lines:
    Assignment of Cars (1909-1954).
    Bus History, undated and [192-]-1991.
        (Includes photographs.)
    Equipment, undated and 1914-1984.
    History (miscellaneous notes), undated and 1884-1986.
        (Includes some employee rosters and some information about the TCRT's streetcar-to-bus conversion scandal of the 1950s.)

**Box 1. (cont.)** **143.F.11.7B**

Operations, undated and 1881-1932.
    (Includes some time tables and master mechanic's correspondence; SEE ALSO: box 3.)
Track and Power, undated and 1892-1989.
    (Includes information about horsecars; SEE ALSO: box 3.)
Miscellaneous Samples of Forms, undated and 1947-1954.

Miscellaneous Notes, undated. (p. 46-214) (2 folders)
    (Includes private car, company-built passenger cars and work cars, boats, and trolley buses; includes photocopied and blueprint car data sheets.)

**Box 2.** **143.F.11.8F**

### Other Companies and Street Railway Systems

American Traction Company (International Falls, Minn.), undated and 1978-1980.
Brainerd Electric Street Railway Company, undated.
Central Warehouse Company (St. Paul, Minn.), undated and 1951-1952.
Duluth Street Railway Company, undated and 1891-1936, 1973. (2 folders)
    (Includes car data sheets and timetables; SEE ALSO: box 3.)
Enos Electric Railway Monorail Line in South St. Paul, undated and [1947?].
    (South St. Paul Rapid Transit Company?)
Fargo & Moorhead Street Railway, undated and 1903-1908.
Grand Forks Street Railway Company, undated and 1907-1917, 1970-1975.
Granite City Railway Company (St. Cloud, Minn.), undated and 1936-1958.
La Crosse City Railway, undated and 1890-1981.
Light Weight Noiseless Electric Street Car Company, undated and 1916-1925.
    (Headquartered in Chicago; cars built in St. Paul.)
Mankato Electric Traction Company, undated and 1952-1954, 1974.
Mesaba Railway Company (Virginia, Minn.), undated and 1917-1937.
    (SEE ALSO: box 3.)
Minneapolis, Anoka and Cuyuna Range Railway Company, undated and 1915-1943.
    (2 folders)
    (SEE ALSO: box 3.)
Minneapolis Filtration Plant Railway, undated and 1928-1953.
Minneapolis Lyndale and Minnetonka Railway ("The Motor Line"), undated and 1886-[1931?].
Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Company, undated and 1918-1976. ("Dan Patch Electric Railroad")
    (After August 1918, the Minneapolis, Northfield & Southern Ry.; includes timetables.)
Minnesota Northwestern Electric Railway (Thief River Falls, Minn.), undated and 1915-1974.
Mississippi Valley Public Service Company (La Crosse, Wis.) (1913-1944).
North Dakota Electric Railways, undated and 1905, 1980-1990.

**Box 2. (cont.)** **143.F.11.8F**

Northern Car Company, undated and 1889-1891, 1989.
South Dakota Electric Railways, undated and 1972.
St. Cloud Public Service Company, undated.
St. Paul Southern Electric Railway Company (St. Paul, Minn.), undated and 1915-1923.
Valley City Street & Interurban Railway Company (Valley City, N.D.), undated and 1953, 1981.
Wahpeton-Breckenridge Street Railway, undated.
Winona City Railway Company, undated and 1889-1980.
  (Includes information about successor companies: Winona Railway and Light Company, Wisconsin Railway Light & Power Company, and Mississippi Valley Public Service Company.)
Winona Newspaper Research (1883-1938). (2 folders)
Wisconsin-Minnesota Light and Power Company, Wisconsin Railway Light and Power Company, undated.

**Box 3.** **142.E.7.3 (dov)**

## Oversize Folders

Bill Olsen Collection of Streetcar Drawings, undated and 1916, 1957-1976:
    (numbered 590304-590398, with gaps)
  Australian Cars, 1966.
  Austrian Cars, 1970.
  Belgian Cars, 1970.
  Canadian Cars, 1976.
  Czech Cars, 1969-1974. (4 drawings)
  Dutch Cars, 1957-1969. (4 drawings)
  German Cars, undated and 1971. (2 drawings)
  "Ohio Cars"?:
    Southeastern Pennsylvania Trans. Authority, 1974.
    Western Pennsylvania Rys. Co., undated.
    Unidentified Car, undated.

Duluth Street Railway Company, 1923-1924.
Minneapolis, Anoka and Cuyuna Range Railway Company, undated and 1935, 1967.
  (right-of-way maps)

Twin City Rapid Transit Company:
  Car Stations - Construction History. Trackage and Maps, undated and 1916.
    (Includes RLO blueline drawings and Sanborn fire insurance maps.)
  Roster of Equipment (2): Rolling Stock; Miscellaneous Details; 1905.
    (Includes TCRT blueprint drawings of 46-foot double-deck streetcars.)

**Box 3. (cont.)** **142.E.7.3 (dov)**

- Schedule Reports: Lake Street Station, 1950-1952.
- Trackage Maps: City, 1916-1943.
- Twin City Lines:
  - Operations, undated. (maps)
  - Track and Power, 1921-1945.

## Oversize Rolls

Central Warehouse Company (blue tube):
- Blueprint Right-of-Way Map, undated.

Mesaba Railway Company (blue tube):
- Oliver Iron Mining Company Topographic Maps: Missabe Range:
  - Chisholm District, 1922.
  - Eveleth District, 1922.
  - Hibbing District, 1922. (2 maps)
  - Virginia District, 1922. (3 maps)
- USGS Topographic Maps (annotated):
  - Dewey Lake SE, Minn. Quadrangle, 1983.
  - Hibbing, Minn. Quadrangle, 1983.

Weightless Noisey Car Company:
- Blueprint and Blueline Mechanical Drawings, undated and 1955, 1976. (4 items)
  - (Drawings of or based on actual streetcars and street railway equipment; apparently for sale and/or use in construction of scale models.)